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Marx's *Capital*

An Unfinishable Project?

Edited by

Marcel van der Linden

Gerald Hubmann



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Contents

List of Tables and Figures VII

Notes on Contributors VIII

- 1 Introduction 1
Marcel van der Linden and Gerald Hubmann
- 2 Editing the Legacy: Friedrich Engels and Marx's *Capital* 31
Regina Roth
- 3 About the Beginning and End of Capitalism. Observations on the Consequences Possibly Derived from the Discoveries of *MEGA*² 48
Jorge Grespan
- 4 Marx's Further Work on *Capital* after Publishing Volume 1: On the Completion of Part II of the *MEGA*² 56
Carl-Erich Vollgraf
- 5 Marx after the *MEGA*² Edition: A Comment 80
Heinz D. Kurz
- 6 The Development of Marx's Theory of the Falling Rate of Profit in the Four Drafts of *Capital* 95
Fred Moseley
- 7 Did Marx Relinquish His Concept of Capital's Historical Dynamic? A Comment on Fred Moseley 144
Timm Graßmann
- 8 The Redundant Transformation to Prices of Production: A Marx-Immanent Critique and Reconstruction 157
Geert Reuten
- 9 Comment on Geert Reuten 195
Christopher J. Arthur

- 10 **Karl Marx's *Books of Crisis* and the Concept of Double Crisis: A Ricardian Legacy** 206
Kenji Mori
- 11 **Marx Meets Manchester. The Manchester Notebooks as a Starting Point of an Unfinish(ed)able Project?** 228
Matthias Bohlender
- 12 **Marx's Itineraries to *Capital*: On Matthias Bohlender's 'Marx Meets Manchester'** 250
Lucia Pradella
- Bibliography** 267
Index of Names 300
Index of Subjects 304

List of Tables and Figures

Tables

- A.1.1 Chronological overview of the manuscripts and printed versions of Marx's economic writings 28
- A.1.2 Topics covered in each *MEGA*² volume 29
- 8.1 Marx's work on *Capital* from 1863 to 1867 159
- 8.2 Reduced transformation scheme 167
- 10.1 Contents of *Books of Crisis* 209
- 10.2 Marx's two views on double crisis 212

Figures

- 10.1 Composition of excerpts 208
- 10.2 Britain's export structure in 1856–7 (% of total export value) 215
- 10.3 Ratio of cotton cloth to raw cotton prices (%) 216
- 10.4 Cotton cloth and raw cotton prices 216
- 10.5 Excess of import and bullion export in Britain 217
- 10.6 Price index of bar iron, pig iron and coal in UK, 1850–60 218

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Introduction*

Marcel van der Linden and Gerald Hubmann

I welcome every opinion based on scientific criticism.

KARL MARX, *Capital* I, Preface to the First Edition



For almost 150 years, scholars have been debating, with varying degrees of intensity, how to interpret Marx's seminal work *Capital*. For many years, however, the various parties to that debate had access to just some of Marx's economic manuscripts. This changed in 2013 with the publication in the 'Abteilung II' of the *Marx-Engels Gesamtausgabe* (MEGA²) of all the known economic writings of Marx and Engels. The publication of these writings allows the lines of intellectual development to be reconstructed more accurately, and one can also explore in detail how Friedrich Engels went about compiling volumes II and III of *Capital* from the vast legacy of manuscripts that Marx left behind after his death in 1883.¹ It should be possible, now, to finally put to rest a

* We would like to thank Chris Arthur, Jurriaan Bendien, Joost Kircz, Jaap Kloosterman, Michael Krätke, Götz Langkau, Kenji Mori, Geert Reuten, Fred Schrader and Jan Willem Stutje for their critical comments on earlier drafts of this Introduction.

1 Engels himself had indicated that Marx was not satisfied with the published version of *Capital*, Volume I: 'It was Marx's original intention to re-write a great part of the text of the first volume, to formulate many theoretical points more exactly, to insert new ones, and to bring historical and statistical material up to date. But his ailing condition and the urgent need to do the final editing of the second volume induced him to give up this scheme. Only the most necessary alterations were to be made, only the insertions which the French edition (*Le Capital*, par Karl Marx, Paris, Lachâtre, 1873) already contained were to be put in'. Engels, 'Preface to the Third Edition' (1883), in Marx 1976, pp. 106–8. On Engels's work as editor of Marx see, *inter alia*: Arthur 1996; Heinrich 1996–7; Vollgraf and Jungnickel 2002; Roth 2002; Hecker 2004; Krätke 2007; Elbe 2008a; Roth 2009; Hollander 2011, chapters 6 and 7.

number of misconceptions and to develop a more comprehensive and accurate picture of Marx as an economic theoretician. This volume of essays aims to initiate this process, building on earlier initiatives in previous years. The present collection combines essays by Marxologists who have worked on the *MEGA*² project with those by scholars versed in Marx's critique of political economy.

Recurring Themes

Although critiques had appeared immediately after the publication in 1867 of Volume I of *Capital*, the debate increased in magnitude and intensity after Friedrich Engels published volumes II and III in 1885 and 1894 respectively. It began with a provocation on the part of Engels. At the end of his preface to Volume II, he challenged the 'vulgar economists' of the period:

According to the Ricardian law of value, two capitals which employ the same amount of living labour at the same rate of pay, assuming all other circumstances to be also the same, produce in the same period of time products of the same value, and similarly the same amount of surplus-value or profit. If they employ unequal amounts of living labour, then they cannot produce the same surplus-value, or profit as the Ricardians say. However, the contrary is the case. In point of fact, equal capitals produce, on average, equal profits in the same time, irrespective of how much or how little living labour they employ. This contradiction to the law of value was already known to Ricardo, but neither he nor his followers were able to resolve it. [... In] the plan of *Capital*, the solution is to be included in Volume III. Some months will still pass until its publication. And so the economists who would like to discover Marx's secret source in Rodbertus, as well as his superior predecessor, have here an opportunity to show what Rodbertus's economics can accomplish. If they show how an average rate of profit can and must come about, not only without violating the law of value, but precisely on the basis of this law, then we shall have to continue our discussion. In the meantime, they had better hurry.²

² Marx 1978, pp. 101–2.

This challenge triggered an initial debate on the ‘enigma of the average rate of profit posed by Marx’, which continued until the publication of Volume III.³ The publication of that volume led to a second stage, which saw the first serious critiques of Marx. The debate has been characterised by waves, with high points on the eve of the First World War, in the 1930s, and in the 1970s, while recently we seem to have been witnessing a fourth peak. Over the years, a large number of contentious issues have been debated. Some of them were not addressed until late or only sporadically; others are recurrent. It is not the place here to reconstruct these debates; that would require a separate and considerable monograph. We will therefore confine ourselves here to mentioning just a few key themes, while recognising that this is a very incomplete list. These themes are almost always closely linked to one another; they form a single network with multiple entry points. Our references to the literature are intended to serve as examples and by no means presume to be exhaustive.⁴

A first point of contention concerns the *architecture* of Marx’s *magnum opus*. In a famous letter to Ferdinand Lassalle in 1858, Marx sketched out the design of what he intended to be his life’s work: ‘The whole is divided into 6 books: 1. On Capital (contains a few introductory chapters). 2. On Landed Property. 3. On Wage Labour. 4. On the State. 5. International Trade. 6. World Market.’⁵ As we know, this plan was never realised. From the 1920s onward, various authors, including Henryk Grossmann, Samezo Kuruma, Roman Rosdolsky, and Winfried Schwartz, wondered why not.⁶ A number of hypotheses have been adduced to account for why Marx failed to pursue his initial design. Some scholars suspect Marx ultimately integrated into *Capital* elements from the other books he intended to write. Others believe Marx simply never got around to the other five subjects,⁷ while there are those, too, who are of the opinion that Marx was never really serious about his original plan. Carl-Erich Vollgraf,

3 A preliminary survey can be found in Loria 1902 [1895]. Interpretations of these early years are offered in Meixner and Turban 1974, and Howard and King 1989, pp. 21–41.

4 A useful bibliography of the debates up to 1960 was published in *Etudes de marxologie* (special issues of the *Cahiers de l’Institut de Science Economique Appliquée*). See Anonymous 1959–61. Admirable attempts to summarise the debates over the past 40 or 50 years can be found in Elbe 2008b and Hoff 2017.

5 Marx to Ferdinand Lassalle, 10 February 1858, *MECW*, vol. 40, p. 270. Marx mentions a more or less identical plan in a letter to Friedrich Engels, 2 April 1858, *MECW*, vol. 40, p. 296.

6 Grossmann 2013; Schauerte 2007; Rosdolsky 1980; Schwartz 1980. In general: Hoff 2017, pp. 268–82. See also Jahn 1986; Galander 1986; and Kogan 1986.

7 A summary of the discussion can be found in Rosdolsky 1980, II, pp. 10–56.

for example, suspects that the six-book plan was not a real plan but a tactical manoeuvre on the part of Marx to persuade a German publisher to publish his work. By making his plan sound so comprehensive, he thought the publisher would be more willing to publish the first volume, on capital.⁸ However, doubts have also been raised about Vollgraf's claim.⁹

Many scholars have attempted to reconstruct what Marx would have said in the unpublished volumes had he gotten round to writing them. Michael Lebowitz, for example, published a 'shadow' version of the book on wage labour.¹⁰ In the final days of the GDR, a project was established at Martin-Luther-Universität Halle which involved attempting to sketch an outline of all the missing books. Inspired by Wolfgang Jahn, dissertations were written about the volume on wage labour (Marion Zimmermann, 1987) and the volume on the state (Gunter Willing, 1989).¹¹

A second point of contention concerns the *method*. In his review of Marx's *A Contribution to the Critique of Political Economy* (1859) Engels claimed that Marx's logical reconstruction formed a corrected reflection of the course of history:

The logical method of approach ... is indeed nothing but the historical method, only stripped of the historical form and of interfering contingencies. The point where this history begins must also be the starting point of the train of thought, and its further progress will be simply the reflection, in abstract and theoretically consistent form, of the course of history, a corrected reflection, but corrected in accordance with laws provided by the actual course of history, since each moment can be examined at the stage of development where it reaches its full maturity, its classical form.¹²

8 Vollgraf 2015, pp. 11 f. In opposition to Vollgraf, one might refer to the following comment by Marx in *Capital*, vol. 1: 'In turn, wages themselves assume highly varied forms, a fact that is lost on the economic compendiums, which in their brutal interest for the material neglect every difference in form. A presentation of all these forms, however, belongs to the specific theory of wage labour, and therefore is not included in this work' (*MEGA*², 11/5, p. 440).

9 Otani 2015, p. 141.

10 Lebowitz 1992. Rosdolsky 1980, 11, pp. 57–60, had earlier speculated about the content of the book on wage labour.

11 Zimmermann 1987; Willing 1989. See also Winkler 1986; Zimmermann 1986; Willing 1986; Block 1986 and 1989. On the project as a whole: Block 2015. See also Kogan 1986, pp. 56–80.

12 Engels 1980, *MECW*, vol. 16, p. 475.

Engels claims that, in his analysis, Marx therefore followed historical developments, but having stripped them of contingencies. This view contrasts with that of Marx himself. For example, in his *Grundrisse* Marx wrote:

It would therefore be unfeasible and wrong to let the economic categories follow one another in the same sequence as that in which they were historically decisive. Their sequence is determined, rather, by their relation to one another in modern bourgeois society, which is precisely the opposite of that which seems to be their natural order or which corresponds to historical development.¹³

For a long time, the 'logical-historical' approach taken by Engels represented more or less the orthodoxy. One of the most serious books to appear on the subject was Jindřich Zelený's *The Logical Structure of Marx's Capital* (1962), which claimed that a dialectical-logical analysis is nothing more than the ideal expression of the historical genesis of an object.¹⁴ The logical *Darstellung* would differ from the historical only because it is based on more abstractions. This view was subsequently also defended by Klaus Holzkamp and Wolfgang Fritz Haug among others.¹⁵ In opposition to this, a 'logical' camp developed, especially from the early 1970s, which explicitly aligned itself with Marx himself.¹⁶

The work of Kōzō Uno deserves a special mention in this regard. He argued that, in *Capital*, Marx combined the theory of capitalism with the history of capitalism to an excessive degree and unsystematically. In his seminal *Keizai seisakuron* (Political Economy, 1936) and *Keizai genron* (Principles of Political Economy, 1955) Uno therefore developed the thesis that economy and ideology, and theory and praxis, should be strictly separated. Any critical analysis of capitalism would need to cover three specific ascending areas: the doctrine of principles (of which he considered Marx's *Capital* a part); the theory of stages of capitalism as a self-contained logical system that owes its dynamics to the contradiction between values and use-values; and the analysis of the historical reality.¹⁷ Uno's approach has had limited influence in the West.

13 Marx 1973, p. 107.

14 Zelený 1980.

15 Holzkamp 1974; Haug 2004.

16 For example Reichelt 1970, pp. 126–36; Kittsteiner 1977; Arthur 1997. A different view (neither historical, nor logical, but 'the presentation of the course or real process of development of an essence') can be found in Meikle 1985, pp. 78–84, quotation at 79.

17 Uno 1980; Albritton 1986; Sekine 1975.

The contrast between the logical-historical and logical methods shows that the theoretical perspectives of Marx and Engels differed in some respects.¹⁸ In this context, reference has often been made to Engels's *Dialectics of Nature*. We will not be considering that debate here. However, there are strong indications that Engels sometimes misinterpreted Marx. One example is the concept of 'simple commodity production', which Engels introduced in the Preface and Supplement to his edition of *Capital* Volume III.¹⁹ In introducing this concept, Engels wanted to say that in pre-capitalist societies commodity owners exchanged those commodities in proportion to the labour time invested in those commodities. Isaak Rubin has already pointed out that this view is not one found in Marx himself.²⁰ The realisation that Engels sometimes misinterpreted Marx does not imply deliberate falsification though.

This problem brings us to the content of *Capital*. In the first edition of *Capital* (1867), Marx wrote: 'What was of decisive importance, however, was to uncover the inner, necessary conjuncture of value-*form*, value-*substance*, and value-*magnitude*, i.e., expressed *ideally*, to prove that the value-*form* emerges from the concept of value'.²¹ For a long time the debate centred mainly on the substance and the magnitude of value. Carl Knies in 1873 and Eugen von Böhm-Bawerk in 1896 had already argued that Marx was inconsistent in *Capital* Volume I in deriving the magnitude of value from labour time. They wondered why, for example, Marx considered only goods produced by human labour, even though there are also all sorts of other goods that are not produced for the market and that nonetheless have a price.²² Other critics subsequently raised other objections, such as that the form of abstraction Marx espoused to identify the substance common to two commodities is logically unacceptable.²³

Marx claims that the substance of the value of a commodity is abstract labour – a notion that, in itself, has given rise to interpretational controversies.²⁴ The magnitude of the value is the labour time required from society

18 Arthur 1996.

19 Engels, 'Preface', in Marx 1981, p. 103: 'It will be clear, then, why at the beginning of Volume I, where Marx takes simple commodity production as his historical presupposition ...' See also Engels, 'Supplement and Addendum to Volume 3 of Capital', in Marx 1981, pp. 1027–47.

20 Rubin 1972 [1924]; Hecker 1997; Chevalier 1983; Rakowitz 2000.

21 *MEGA*², II/5, p. 43.

22 Knies 1873, pp. 117–23; Böhm-Bawerk 1949, pp. 66–77.

23 Nanninga 1975.

24 Marx: 'all labour is an expenditure of human labour-power, in the physiological sense,

(not from individuals) to produce the product. But what is that labour time? Marx says, ‘The value of a commodity is determined by the total labour-time contained in it, both past and living.’²⁵ The past labour time can correspond to at least two aspects. First, to the commodity chain. John Locke and Adam Smith had previously noted that every commodity forms the end of a commodity chain, a chain that also includes all previous labour that *indirectly* played a role in the production of the final product (the production and transportation of raw materials, tools, etc.). How should one measure that indirect labour time? Some deny that the calculation is even possible, while others believe that it should *in principle* be feasible, even though it has never been attempted.²⁶ Secondly, the invested labour power itself has a past. It took a highly skilled worker years of labour time to acquire his commodity (skilled labour power); one hour of his direct labour time therefore embodies more indirect labour time than an hour’s work by an unskilled labourer. Marx speaks of ‘complex labour’ as ‘*intensified*, or rather *multiplied* simple labour, so that a smaller quantity of complex labour is considered equal to a larger quantity of simple labour.’²⁷ The question then, of course, is how complex labour can be analytically reduced to simple labour.²⁸

Many other aspects of value-magnitude have engaged the minds of scholars. Since in *Capital* Volume I Marx had assumed that the value of a commodity was determined by the socially necessary labour time, capitals of equal mag-

and it is in this quality of being equal, or abstract, human labour that it forms the value of commodities’ (Marx 1976, p. 137). However, he also says that ‘abstract social labour’ creates value (Marx 1976, p. 308). To what extent is this inconsistent? ‘Is the abstraction “physiological” or “social” – or is there perhaps no call for this distinction to be drawn? Are nerves and muscles a “form of appearance” of the social – or is the social an “expression” or “presentation” of nerves and muscles?’ Castoriadis 1984, p. 273. A precursor in the debate was Isaak Rubin: Rubin 1978 [1927]. See also Arthur 1976; Vincent 1977; Fausto 1978; Krause 1979; Murray 2000; Bonefeld 2010; Kicillof and Starosta 2011; Carchedi 2011; Bonefeld 2011; Moseley 2011.

25 Marx 1981, p. 369; *MEGA*², II/15, p. 257.

26 Müller 2014, pp. 215–30. A related issue is that of joint production: the sheep tended by a shepherd produce wool and meat, and so allow the shepherd to contribute to two quite different commodity chains. For an attempt to resolve this problem, see Farjoun 1984.

27 Marx 1976, p. 135.

28 The debate on this began with Böhm-Bawerk 1949, pp. 80–6. Contributions include Altwater 1971; Rowthorn 1974; Roncaglia 1974; Bowles and Gintis 1977; Morishima 1978; Zech 1978; Blaug 1982. A brief summary can be found in Krätke 1997, cols. 94–118. See also Rosdolsky 1980, chapter 31, pp. 506–20.

nitude but with a different organic composition would yield different rates of profit. In *Capital* Volume III, on the other hand, Marx noted that, despite a different organic composition, capitals of equal magnitude yield the same rates of profit:

We have shown, therefore, that in different branches of industry unequal profit rates prevail, corresponding to the different organic composition of capitals, and, within the indicated limits, corresponding also to their different turnover times; so that at a given rate of surplus-value it is only for capitals of the same organic composition – assuming equal turnover times – that the law holds good, as a general tendency, that profits stand in direct proportion to the amount of capital, and that capitals of equal size yield equal profits in the same period of time. The above argument is true on the same basis as our whole investigation so far: that commodities are sold at their values. There is no doubt, however, that in actual fact ... no such variation in the average rate of profit exists between different branches of industry, and it could not exist without abolishing the entire system of capitalist production. The theory of value thus appears incompatible with the actual movement, incompatible with the actual phenomena of production, and it might seem that we must abandon all hope of understanding these phenomena.²⁹

There seemed to be a fundamental contradiction here that threatened to undermine the entire Marxist edifice. In the further course of his argument, Marx proposed a solution for what he regarded as merely a paradox, an apparent contradiction.³⁰ This solution failed to convince many of his critics. Ever since, the question of the relationship between the determination of value and the system of prices of production – which became known as the ‘transformation problem’ – has been a controversial one among scholars. The most influential early opponent was the Austrian theoretician of marginal utility Eugen von Böhm-Bawerk, who saw it quite simply as a ‘bare contradiction’: ‘The theory of the average rate of profit and of the prices of production cannot be reconciled with the theory of value.’³¹ The discussion soon assumed a math-

29 Marx 1981, p. 252.

30 Marx 1981, chapters 9 and 10.

31 Böhm-Bawerk 1949, p. 30. At more or less the same time, many other authors in addition to Böhm-Bawerk addressed the transformation problem. See, *inter alia*, Lexis 1895; Komorzynski 1897; Sorel 1897; Diehl 1898. A well-known response was Hilferding 1949.

emational form, and from the 1950s it was ‘translated’ into Leontief matrices.³² Over time, numerous solutions for the transformation problem have been put forward, most of which were sharply criticised. Generally speaking, these solutions can be divided into six groups:³³ i) the reproduction scheme argument (Ladislaus von Bortkiewicz, Paul Sweezy, and Francis Seton), who pointed out that Marx had transformed output into prices while input remained expressed in terms of values, and they attempted to find a solution for this;³⁴ ii) the Sraffa-based solution of, for example, Alfredo Medio, who argued that a solution can be found by introducing a (non-existent) standard commodity produced with the socially average organic composition of capital;³⁵ iii) the iterative method, which aims to solve the problem by using outputs (Marxian prices of production) as inputs, so that new prices of production, etc. can be derived;³⁶ iv) the ‘new solution’ (Gérard Duménil, Alain Lipietz, Duncan Foley), which argues that the distribution of commodities or of money wages should be defined *ex post*;³⁷ v) the Temporal Single-System Interpretation (TSSI) of Andrew Kliman, Alan Freeman, and others, which assumes that the supposed Marxian inconsistencies dissolve when values and prices are not theorised as separate systems but as a unified system operating in real time;³⁸ and vi) the probabilistic approach of Emmanuel Farjoun and Moshé Machover, which assumes that prices and profits, etc., form stochastic distributions, so that there is no direct

32 The mathematisation began cautiously in 1895 with Wolfgang Mühlport, and was subsequently continued by V.K. Dmitriev and Ladislaus von Bortkiewicz (Mühlport 1895; Dmitriev, 1974; Bortkiewicz 1906–7 [in part translated as Bortkiewicz 1952]; Bortkiewicz 1949 [1907]. Regarding this early mathematisation see also Howard and King 1987, pp. 265–8. Cameron 1952; Morishima and Seton 1961). George Kharasov developed a quite separate approach: Charassof 1910.

33 The first four groups are taken from Hunt and Glick 1987, vol. 4.

34 Sweezy 1942; Seton 1957.

35 Medio 1972. See also Cogoy 1977.

36 Shaikh 1977 and 1984. Shaikh 2016, p. 240, argues that the ‘transformation problem’ is generic, ‘because it obtains in every school of thought which deals explicitly with the question of aggregate profit. The real issue is that there are two sources of aggregate profit, profit on production and profit on transfer, and it is their combination which accounts for this particular phenomenon ... This duality disappears from the literature, leaving behind what seems to be an intractable puzzle: the money value of aggregate profit, or indeed of aggregate net output, can vary with relative prices’.

37 Duménil 1980; Lipietz 1982; Foley 1982.

38 Kliman and McGlone 1988; Freeman and Carchedi (eds.) 1996; Kliman 2006. For criticisms of the TSSI see: Foley 2000; Mongiovi 2002; Laibman 2004; Veneziani 2004. See now also Moseley 2016.

linkage between individual prices and their respective individual values, but that there is a *statistical* connection that can be constructed without involving prices of production.³⁹

The importance of the *value-form* was recognised only relatively late on. Though Isaak Rubin had pointed out as early as 1920 that this concept constituted a key element in Marx's theory, it was not until the 1960s that the idea was resurrected.⁴⁰ The work of Hans-Georg Backhaus, who studied with Theodor W. Adorno, was crucial in this.⁴¹ By comparing the first and subsequent editions of *Capital* Volume I, Backhaus concluded that the standard interpretation of Marx's notion of the commodity was untenable. In most interpretations of Marx, it was assumed that *first* there were commodities that were exchanged for one another, and that this exchange *subsequently* gave rise to money as a general equivalent. It was assumed, in other words, in line with Engels's 'logical-historical' method, that the logical argumentation in the earlier chapters of *Capital* Volume I also described a historical development. In complete rejection of this view, Backhaus argued that Marx's theory of value 'is conceived as a critique of pre-monetary theories of value – at the level of simple circulation it is essentially money theory'.⁴² This view gained much ground in later years.⁴³

For Marx, *labour power* is a commodity just like any other. 'The value of labour-power is determined, as in the case of every other commodity, by the labour-time necessary for the production, and consequently also the reproduction, of the specific article'.⁴⁴ Yet there is also a difference between the commodity 'labour power' and other commodities: 'In contrast ... with the case of other commodities, the determination of the value of labour-power contains a historical and moral element'.⁴⁵ This caveat prompted a fundamental criticism by

39 Farjoun and Machover 1983 and 1985. This extremely original interpretation has so far prompted scarcely any response. But see Wells 2007.

40 Rubin 1972 [1924], esp. pp. 112–16.

41 The trigger was Backhaus 1980. This and a number of other key contributions by Backhaus have been collected in Backhaus 1997. See also Holt 1974.

42 Backhaus 1997, p. 94.

43 In the English-speaking world Chris Arthur was a key protagonist. See Arthur 1979; Eldred and Hanlon 1981; Reuten 1988; Bellofiore 1989; Arthur 2002; Likitkijssomboon 1995; Reuten 1995; Murray 2013; Arthur 2014. The debate also flared up in the GDR. See Hecker 1979; Oguro 1986. But see also Haug 2003; Kincaid 2005.

44 Marx 1976, p. 274.

45 Marx 1976, p. 275.

Karl Liebknecht in a book published posthumously: the introduction of 'a historical and moral element' to the argumentation meant that here 'A factor from the arena of the power struggle between the classes' is introduced, which constitutes 'an alien element' of the theory and contains the seed of the destruction [*Zersprengung*] of the Marxian construction of value.⁴⁶ We find a similar criticism much later in Cornelius Castoriadis:

When the 'law of value' must be applied to the basic commodity, labour power, it becomes meaningless: it is an empty formula which can be provided with a content only by the struggle between workers and employers, a struggle which is the main determinant of the absolute level of wages and their evolution in time. And since all the other 'laws' presuppose a *given* distribution of the social product, the system as a whole remains suspended in mid-air, completely undetermined.⁴⁷

Another problem concerns the labour market. Do workers 'sell' their labour power to the employer, as Marx claims, or do they 'rent it out'? Can it be regarded as selling, if it relates to a temporary transaction? And if the worker rents out his labour, what are the implications for the theory of value? Would wage labourers still be creating more value than they receive in the form of wages?⁴⁸

In the wake of the international student movement since the late 1960s and its quest for a social orientation among intellectuals, the extent to which Marx's distinction between productive and unproductive labour is usable or not has been the subject of much debate. Especially in his *Results of the Immediate Process of Production* Marx had claimed that:

Every productive worker is a wage-labourer, but not every wage-labourer is a productive worker. Whenever labour [sic] is purchased to be consumed as a *use-value*, as a *service* and not to replace the value of variable capital with its own *vitality* and be incorporated into the capitalist process of production – whenever that happens, labour is not productive and the wage-labourer is no productive worker.⁴⁹

46 Liebknecht 1922, p. 254.

47 Castoriadis 1987, p. 31.

48 Oppenheimer 1912, p. 121; Kuczynski 2014b.

49 Marx 1976, p. 1041.

The debate centred on two questions: How meaningful is the distinction? And where is the boundary between the two types of labour? Not surprisingly, responses differed widely.⁵⁰

An entirely different question concerns the reproduction of labour power. After Margaret Benston had initiated the debate on this in 1969, a wide-ranging discussion developed concerning the absence of domestic labour in Marx's analysis and how it could be integrated into the analytical framework. This debate reached its peak in the 1970s, but continues even today, though with less intensity.⁵¹

In *Capital* Volume II we find Marx's analysis of the *reproduction and circulation of the total social capital*. In support of his argument, Marx used the familiar reproduction schemes, which were inspired in some ways by the closed-loop models of the physiocrats. Initially, few people were particularly interested in these schemes. The first to employ them were Russian Marxists, such as Nikolai Danielson (Nikolai-on), Sergei Bulgakov, Piotr Struve, and Mikhail Tugan-Baranovsky, who wanted to apply them in order to investigate whether capitalist development in Russia was necessary or not. On the eve of the First World War the debate turned to Central Europe, mainly owing to the publication of Rosa Luxemburg's *The Accumulation of Capital* (1913). Her thesis, that the schemes could be used to demonstrate that capitalism would always need non-capitalist territories to fuel its expansion, was refuted by, among others, Otto Bauer, Gustav Eckstein, and Nikolai Bukharin.⁵²

Initially, the reproduction schemes were applied primarily as a means to understand the laws of motion of capitalism. The schemes were used, *inter alia*, to argue that a 'pure' capitalist economy is impossible, that such an economy must inevitably collapse, or that a dynamic capitalism free of crises is conceivable. In contrast, Roman Rosdolsky has argued that the reproduction

50 Gough 1972; Colliôt-Thélène 1973; Berthoud, 1974; Nagels 1974; O'Connor 1975; Cuyvers 1978; Hunt 1979; Michielsen 1980; Meiksins 1981; Laibman 1982; Gluck 1982; Leadbeater 1985; Wolff 1994; Mohun 1996; Houston 1997; Dämpfling 2000. For the genesis of Marx's distinction between productive and unproductive labour see: Lietz 1979 and 1983.

51 Benston 1969. Influential contributions included Seccombe 1974; Meulenbelt 1975; Himmelweit and Mohun 1977; Bock and Duden 1977; Smith 1978; Molyneux 1979; Barrett 1980; Fox (ed.) 1980; Sargent 1981; Menon 1982; Dietrich 1983; Delphy 1984; Beechey 1987; Walby 1989; Windebank 1994; Vogel 2000; Jefferson and King 2001; Delphy 2003; Vogel 2008; Hensman 2011.

52 For an overview see Rosdolsky 1980, chapter 30 (pp. 460–505). Interesting as well is Burchardt 1931–2.

schemes are *not* intended as a means of reconstructing laws of motion; their role is to explain how an anarchic system comprising many individual capitals, the primary objective of each of which is the creation of value and surplus value, can result in a dynamic whole that, despite regular disruptions owing to economic crises, remains fairly stable over long periods.⁵³ Or in the words of Ernest Mandel: 'The function of the reproduction schemes is thus to prove that it is possible for the capitalist mode of production to exist at all'.⁵⁴ In opposition to this interpretation, there are still authors wanting to use the reproduction schemes as a tool for 'real analysis'.⁵⁵

Regarding the *general trend of capital accumulation*, the main point of contention was probably the so-called tendency for the rate of profit to fall. In the *Grundrisse* Marx believed he had discovered a law that, 'despite its simplicity, has never before been grasped and, even less, consciously articulated'.⁵⁶ He stated this law as follows:

... if the rate of profit declines for the larger capital, but not in relation with its size, then the gross profit rises although the rate of profit declines. If the profit rate declines relative to its size, then the gross profit remains the same as that of the smaller capital; remains stationary. If the profit rate declines more than its size increases, then the gross profit of the larger capital decreases relative to the smaller one in proportion as its rate of profit declines. This is in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations.⁵⁷

Marx returned to this in the third volume of *Capital*.⁵⁸ There he called the 'progressive tendency for the general rate of profit to fall' a self-evident necessity, and 'simply *the expression, peculiar to the capitalist mode of production*, of the progressive development of the social productivity of labour'.⁵⁹ Julius Wolf, Benedetto Croce, and Mikhail Tugan-Baranovsky had expressed their doubts

53 Rosdolsky 1980, II, pp. 445–59.

54 Mandel 1975, p. 25.

55 See, for example, Trigg 2006; Custers, 2007.

56 Marx 1973, p. 748.

57 Marx 1973, p. 748.

58 Müller 2010.

59 Marx 1981, p. 319.

early on.⁶⁰ In the crisis years of the 1920s and '30s, the issue became a matter of urgency. Did the general rate of profit actually decline in the longer term? And if so, was the crisis an expression – perhaps even the terminal expression – of a general downward tendency in the rate of profit? Some – such as Karl Kautsky – emphatically denied that it was.⁶¹ Others felt that capitalism would eventually collapse, in line with Marx's thesis that 'The *true barrier* to capitalist production is *capital itself*'.⁶² Henryk Grossman vigorously defended this thesis in his seminal book of 1929, which prompted further debate.⁶³

Two particular arguments were initially posited in opposition to Marx. First, the rising organic composition of capital could be offset by a rising rate of surplus value, and as a result of this the development of the rate of profit could not be determined: the relationship between the two elements is contingent and so no law could possibly be based on this relationship. Secondly, the organic composition need not necessarily rise, because even with technological progress the value of the constant capital could fall owing to the deployment of cheaper methods of production. The first argument had already been posited by Bortkiewicz. The second became influential especially after the 1940s.⁶⁴

A new phase emerged when Nobuo Okishio, building on work by Kei Shibata and adopting a Sraffa model, formulated his famous theorem in the early 1960s which states that an industry that introduces a technological innovation associated with a diminished use of labour power and additional consumption of raw materials etc. will realise a higher rate of profit if real wages are constant.⁶⁵ The theorem had been anticipated much earlier in a rigorous mathematical way by Georg von Kharasov, but it caught the attention of the scholarly community only after Okishio's publication.⁶⁶ It looked as if Marx's argument had been refuted. The Temporal Single-System Interpretation referred to above claims, in turn, to have refuted Okishio's theorem, a claim subsequently contradicted by others.⁶⁷

60 Wolf 1891; Croce 1966 [1899], chapter 5; Tugan-Baranovsky 1901, pp. 230–1 and 1905, chapter 9.

61 Kautsky 1927, vol. II, p. 540.

62 Marx 1981, p. 358.

63 Grossmann 1929; De Wolff 1932; Mattick 1934; Pannekoek 1977 [1934].

64 Schmiede 1973, pp. 137–62; Bortkiewicz 1906, p. 466; Moszkowska 1943, pp. 21–38.

65 Shibata 1934 and 1939; Okishio 1961, 1963 and 1977. Some of Okishio's key essays have been published together in Okishio 1993. For the context see: Groll and Orzech 1989.

66 Charassof 1910; Mori 2007 and 2011; Mori et al. 2008, pp. 541–3.

67 Ramos Martinez 2004; Laibman 1999; Rieu 2009.

The tendency is controversial not only theoretically but also empirically. Paul Sweezy for example, in his *Theory of Capitalist Development* (1942), rejected the falling tendency of the rate of profit and replaced it later, in collaboration with Paul Baran, by the law of rising surplus.⁶⁸ Joseph Gillman, on the other hand, thought Marx's law could be justified, provided its terms are redefined.⁶⁹ Since the 1970s, we have seen a sharp rise in the number of studies that have observed a tendency for the rate of profit to fall.⁷⁰

According to Marx, *economic crises* are an integral part of capitalist development. They are 'the real concentration and forcible adjustment of all the contradictions of bourgeois economy'.⁷¹ Nevertheless, Marx did not formulate a fully worked out theory of crisis. His ideas on crises are contained in a large number of fragments – most of which had never been published prior to *MEGA*². This partly explains why a large number of different theories of crisis, based on Marx, have been formulated since the end of the nineteenth century. Many of these theories point, rightly, to a link between the development of the general rate of profit and the more or less periodic interruptions in the process of accumulation.⁷² At the same time, however, a long-term trend (the tendency for the rate of profit to fall) is insufficient, of course, to explain a periodic phenomenon.⁷³

During and just after the Great Depression of the 1930s, many studies of the business cycle were published, including those by Paul Sweezy, John Strachey, Michał Kalecki, and Maurice Dobb.⁷⁴ With the economic situation improving in subsequent decades, interest in the subject waned. But 'Suddenly, in the 1970s, in a period of high unemployment, more violent cyclical fluctuations, and persistent inflation, there have been a whole flood of books and articles on the business cycle by Marxists'.⁷⁵

68 Baran 1957; Baran and Sweezy 1966, chapter 3. For criticisms, see, for example, Mattick 1978, pp. 187–209.

69 Gillman 1958.

70 Some examples: Weisskopf 1979; Reati 1986; Moseley 1987; Priewe 1988; Moseley 1997; Duménil and Lévy 2002a and 2002b; Brenner 2002; Beitel 2009; Edvinsson 2010; Marquetti, Maldonado Filho and Lautert 2010; Smith and Butovsky 2012; Basu and Manolakos 2013; Weiß 2015.

71 *MECW*, vol. 32, p. 140; *MEW*, 26.2, p. 510.

72 For example, Grossmann 1929. To a certain extent, too, Dobb 1937, chapter 4. For a criticism see, for example, Moszkowska 1935, pp. 45–59.

73 See the clear account by Mandel, 'Introduction', in Marx 1981, pp. 38–42.

74 Strachey 1935; Dobb 1937; Kalecki 1937, pp. 77–97; Sweezy 1942.

75 Sherman 1979, pp. 1–23, at 1.

Marx's fragmentary statements about crises are by no means unambiguous. For example, he wrote:

The conditions for immediate exploitation and for the realization of that exploitation are not identical. Not only are they separate in time and space, they are also separate in theory. The former is restricted only by the society's productive forces, the latter by the proportionality between the different branches of production and by the society's power of consumption. And this is determined neither by the absolute power of production nor by the absolute power of consumption but rather by the power of consumption within a given framework of antagonistic conditions of distribution, which reduce the consumption of the vast majority of society to a minimum level, only capable of varying within more or less narrow limits.⁷⁶

Marx was referring here both to the overproduction of capital in the form of means of production and to the overproduction of consumer goods. The relationship between the two was problematic. Such polyinterpretability has resulted in at least three possible explanations being distilled from Marx's oeuvre: a surplus of commodities (underconsumption), the elimination of unemployment (wage-push), and technical innovations (rising organic composition of capital).⁷⁷ Over the years, each of these three approaches has taken on a number of different forms, such as the theory of the 'profit squeeze', or the thesis of Italian *operaismo*, which sees the working class as the central protagonists in bringing about the crisis through their role in the class struggle. In addition to these somewhat monocausal explanations, there have increasingly been attempts to combine different elements, though the methods adopted varied widely.

In conclusion, we would like to refer to two fundamental controversies affecting Marx's entire oeuvre. The first centres on the extent to which *the labour theory of value as a whole* is superfluous or whether it is actually indispensable. As is apparent from the foregoing, misgivings have been raised in relation to numerous points concerning the accuracy and consistency of Marx's economic theory. Time and again, the ongoing controversies have tempted Marx's supporters to wonder whether the theory of labour value is actually necessary as a

76 Marx 1981, p. 352.

77 Sherman 1971, pp. 28–55; Itoh 1978, pp. 129–55; Sweezy 1942.

basis for the rest of Marx's theoretical edifice. Some of those who thought it was not attempted to create a synthesis of Marx's theory of value and of marginalism. Engels, too, had noted that it should be possible to build a 'vulgar socialism' 'on the basis of the Jevons-Menger theory of use-value and marginal utility'.⁷⁸ Those who took that view – without, of course, regarding themselves as 'vulgar socialists' – included Christiaan Cornelissen, Mikhail Tugan-Baranovsky, Rudolf Kuyper, and Sam de Wolff.⁷⁹ Other Marxists, such as Nikolai Bukharin, rejected this approach.⁸⁰

The publication of Piero Sraffa's *The Production of Commodities by Means of Commodities* in 1960 led to a further round of misgivings. Neo-Ricardians such as Geoff Hodgson, Ian Steedman, et al. took the view that prices could be derived directly from physical quantities of commodities. They attributed a central role to the derivation of equilibrium prices and argued that 'Marx's value reasoning ... must therefore be abandoned, in the interest of developing a coherent materialist theory of capitalism'. This prompted a sophisticated debate.⁸¹

Other ways were attempted to put Marx's theory of value in perspective. The relationship between exploitation and value theory was regularly questioned, for example. In the 1930s, Oskar Lange believed that the 'fact of exploitation can also be deduced without the help of the labour theory of value' – a view subsequently also defended by Geoff Hodgson, G.A. Cohen, and others.⁸²

A final general issue concerns *the empirical verifiability* of Marx's approach. To what extent, if any, can the analysis of value be translated to the empirical 'surface'? For example, can the Marxian rate of profit really be measured based on market prices? Or is there a disparity between the two levels? Werner Sombart already claimed that value is a logical rather than an empirical category.⁸³ Paul Mattick and others have developed this idea. Mattick argued, for example, that the tendency for the rate of profit to fall generally remained invisible because

78 Marx 1981, p. 100 (Preface).

79 Cornelissen 1903; Kuyper 1902–3; Tugan-Baranovsky 1905 and 1906; De Wolff 1925, p. 767. On this see Kalshoven 1993 and Buiting 2003. The theme was a recurring one. See, for example, Johansen 1963; Morishima 1973, chapter 4.

80 Bukharin 1972 [1919], pp. 163–72.

81 Steedman 1977, p. 207. See also Hodgson 1991. Contributions to the debate included Cogoy 1977; Kurz 1979; Gozzi 1979; Hunt 1982; Dostaler 1982; Ernst 1982; Shaikh 1982 and 1983; Fine (ed.) 1986; Roberts 1987; Salanti 1990; Screpanti 1993; Cavalieri 1995.

82 Lange 1935, p. 195, note 3; Hodgson 1982; Coolsaet 1983; Cohen 1988; Holländer 1982.

83 Sombart 1894, p. 574.

of the effect of opposing forces. 'Marx's theory of accumulation, as the theory of the tendential fall of the rate of profit, restricts itself to a contradiction inherent in capitalist production, which, although ever present, need not be visible in market events, as it can be counteracted by capitalist reactions for shorter or longer periods of time'.⁸⁴ Recently, Christoph Henning also defended such a view. 'To demonstrate that the theory of value is unnecessary for determining market prices is not to say anything about the theory of value as such'.⁸⁵ Contrasting with this approach is that of those who endeavour to test Marx's theses empirically, though the methodological problems involved in doing so are considerable.⁸⁶ As we shall see, the newly published texts and manuscripts in the *MEGA*² will provide a new basis for research in this and the other problem areas discussed previously.

The *MEGA*² Project in Context

Only a small part of Marx's economic writings were ever published during his lifetime. They included the *Manifesto of the Communist Party* (1848), the *Critique of Political Economy* (1859), and the first volume of *Capital* (1867).

On the eve of the First World War a group of Marxists in Vienna (Max Adler, Otto Bauer, Adolf Braun, Rudolf Hilferding, Karl Renner, and David Rjazanov) considered preparing a critical edition of the works of Marx and Engels. Their plan proved unfeasible however.⁸⁷ After World War I and the Russian Revolution, renewed attempts were made to realise that plan. In 1921 David Rjazanov was appointed director of the newly founded Marx-Engels Institute in Moscow. He energetically prepared the edition of the Marx-Engels-Gesamtausgabe (*MEGA*, later designated *MEGA*¹), supported initially by the German Social Democratic Party, which at the time held the original manuscripts of Marx and Engels.⁸⁸ In 1927, in collaboration with the Institute for Social Research in Frankfurt, the first of an envisaged 42 volumes appeared. Over the next six years a further 12 volumes were published. The rise of National Socialism and the consolidation of Stalinism in the Soviet Union led to the pro-

84 Mattick 1980, p. 75. A related argument is presented in Pilling 1972. For critiques see Mandel 1975, pp. 19–20, and Eberle 1973.

85 Henning 2014, p. 145. See also Henning 2007.

86 See, for example, Gillman 1958, especially chapter 4; McCormack 2014. Methodological reflections in Diefenbach et al. 1976; Altvater, Hoffmann and Semmler 1976; Mohun 2004.

87 Langkau 1983.

88 Vollgraf, Sperl and Hecker (eds.) 1996; Rojahn 1996.

ject being abandoned. The German contribution was terminated after Hitler's *Machtergreifung* in 1933. By then, in 1931, Rjazanov had been arrested; he was executed on 21 January 1938. His successor, Vladimir Adoratsky, died seven years later. In 1939–41 the *Grundrisse* was published in two parts in Moscow by Paul Weller (Pavel Veller), edited according to *MEGA*¹ guidelines, but not as part of the parent project.⁸⁹ After that, things came to a standstill and for a long time no progress was made.

It was not until the 1950s that the need for a critical edition again began to be strongly felt. In post-Stalinist Eastern Europe there was now slightly more scope for discussion, while in the West the debate about Marx was revived.⁹⁰ In 1969 it was decided to make a second attempt to publish a Marx-Engels-Gesamtausgabe.⁹¹ By then, most of the original Marx/Engels manuscripts were at the International Institute of Social History (IISH) in Amsterdam, while about one-third of them had come into the possession of the Central Party Archive in Moscow (now the Russian State Archive of Social and Political History [RGASPI]). The German Friedrich-Ebert-Foundation also held a small number of manuscripts.⁹² The IISH made its material available, under the condition that it was published in authentic form and in accordance with scientific research standards, and the Institutes for Marxism-Leninism in Moscow and East Berlin, as formally equal partners, assumed responsibility for preparing the volumes for publication.⁹³ The edition would consist of four parts: I) Works, articles, drafts; II) *Capital* and the preliminary studies; III) correspondence from and to Marx and Engels; and IV) Excerpts, notes and marginalia. The first volume (I/1) appeared in 1975, with a further 39 volumes appearing before the collapse of the Soviet Union and the GDR.⁹⁴

By the end of 1989 it had become clear that the *MEGA*² was in danger of having to be discontinued. In May 1990 the Internationale Marx-Engels-Stiftung (IMES) was set up in Amsterdam to continue work on the *MEGA*². The foundation was supported by the Academy of Sciences in Berlin, the IISH, the Institute of Marxism-Leninism in Moscow, and the Karl-Marx-Haus in Trier. Day-to-day management lay with Jürgen Rojahn, staff member of the IISH. In 1998 the first 'new' volume was published, and in 2000 coordina-

89 Bahne 1983. On the first edition of the *Grundrisse* see Hecker and Arnold 2010; Vasina 2010.

90 One indication of this trend in the GDR was perhaps the volume Hertel (ed.) 1957.

91 For the historical background see Dlubek 1992 and 1993.

92 Mayer 1966–7; Hunink 1986, pp. 52–74.

93 Rojahn 1991.

94 A succinct but informative survey of activities between 1969 and 1989 can be found in Kundel 1989. See also Tschepurenko 1989.

tion of the *MEGA*² was assumed by the Academy in Berlin (now called the Berlin-Brandenburg Academy of Sciences), where the editorial work is now centred.⁹⁵

The literary estate of Marx and Engels being very voluminous, the *MEGA*², once completed, will cover 114 volumes. While 63 volumes have already been published, large parts of the literary estate, particularly excerpts, manuscripts, and correspondence, remain unpublished. In addition, often, many of the more familiar works of Marx and Engels can be accessed only in editorially flawed or even deficient editions. This is certainly the case with important works like *The German Ideology*,⁹⁶ but even the editions of *Capital* offer a text that deviates from what Marx left. This is true not only of Volumes II and III, which were published posthumously; today's readers of Volume I will generally turn to the fourth edition (1890), edited by Engels. This is the edition most frequently cited, but Marx himself never saw it. There are, in fact, six versions of *Capital* Volume I in circulation: four German editions (1867, 1872–3, 1883, 1890) and the French and English editions (of 1872–5 and 1887 respectively), all of which have now been published in the *MEGA*², in volumes II/5 to II/10.⁹⁷

The voluminous collections of manuscripts pertaining to *Capital* have never before been published. The *MEGA*² offers the works, the correspondence, and the literary estate of Marx and Engels in editions that are complete, authentic, and in their original language. High fidelity to the originals being an editorial guideline, all writings are reproduced in exact conformity with the author's original text, all copy being checked against the manuscripts (in Amsterdam or in Moscow) or against authorised printed sources. Thus, in line with modern editing methods, the *MEGA*² comprehensively displays – insofar as the relevant drafts are available – the textual development of the various works, from the earliest sketches to the final version. Each volume comprises two parts: in the text volume either the manuscript version or a printed authorised version is reproduced in its entirety; in the second part, the *Apparat*, the textual development from the manuscript to the various printed versions is completely documented, with variants being listed. For the first time, all versions drafted or corrected by the authors are being made available for study. The complete documentation of this textual development is an important feature, one

95 Hubmann, Münkler and Neuhaus 2001.

96 On this, see also Carver and Blank, 2014a and 2014b.

97 For an analysis of the genesis of the various editions of *Capital* Volume I, see Kuczynski 2014a.

that differentiates the *MEGA*² from other, often politically motivated editions offering a 'solidified' and 'finalised' version of the works of Marx and Engels. *MEGA*¹ suffered the same unfortunate fate, incidentally, since its aim was to 'reconstruct' the works of Marx and Engels.⁹⁸

It is only by taking the philological approach adopted by the *MEGA*² that one can identify what Engels once described as the central feature of their thinking – the evolutionary factor: 'Our theory', Engels wrote, 'is not a dogma but the exposition of a process of evolution'.⁹⁹ That the philological approach taken by the *MEGA*² throws new light on the thinking of Marx and Engels is shown clearly by the example of *The German Ideology*, which was published in Part I ('Abteilung I') of the *MEGA*² in 2017. By collating the fragmentary manuscripts, previous editions suggested the existence of a finished 'work', in which the philosophy of historical materialism is supposed to have been elaborated. In contrast, textual reconstruction of the unfinished manuscripts in the *MEGA*² reveals that the true concern of Marx and Engels was a critique of post-Hegelian philosophy. This did not – as previous editions would have it – culminate in the elaboration of the philosophy of historical materialism, but rather in the revocation of philosophy and the abandonment of philosophical discourse in favour of politics and economy. Knowing this, it becomes evident why the authors did not publish the material of *The German Ideology* at a later time: in the development of their evolutionary thinking they had surpassed the position elaborated in the manuscripts.

As this example demonstrates, the intentions with which an edition is prepared and the way the writings themselves are edited do make a difference. And this difference concerns not just how the textual development is depicted; it extends equally to the historical contextualisation. In this respect, previous editions emphasised the letters *of* Marx and Engels, whereas *MEGA*² makes accessible for the first time the letters that were written *to* them. A major part of these letters – written by more than 2,000 correspondents from all over Europe and the United States – are being published for the first time. An entire network of political emigrants and a network linking early workers' movements are thereby laid bare, and, based upon this, research – similar to that focusing on the *Capital* part of the *MEGA*² – can now draw on completely new material. The reconstruction of this international network represents a change of perspective in relation to Marx and his political activities. The previous image of

98 For an overview of critical editions of Marx and Engels, see Rojahn 1987.

99 Friedrich Engels to Florence Kelley Wischnewetzky, 28 December 1886 (The New York Public Library, Manuscripts and Archives Division, The Friedrich Adolph Sorge Papers).

an unconciliatory and polarising Marx needs to be revised, because the historical context reveals a Marx who was rather countervailing and mediative in his actions.

Another area in which *MEGA*² explores hitherto uncharted territory is the journalism of Marx and Engels. It is a fact well known that Marx and Engels contributed articles and correspondence to a large number of newspapers (120 in total). But since most of those articles were published anonymously, a comprehensive survey of their journalism has proved impossible until now. By conducting detailed analyses of authorship, an attempt has been made to establish the totality of the journalistic work of Marx and Engels. Thus, in the work on some of the current volumes of the *MEGA*², over 200 articles could be newly ascribed to Marx and Engels. On the other hand, these analyses of authorship have sometimes led to articles hitherto regarded as having been written by Marx having to be reattributed. These include the article on aesthetics, which has long been ascribed to Marx but which we now know was definitely not written by him.¹⁰⁰ György Lukács had presumed as much, before Moscow silenced him on this point.¹⁰¹ So, once again, we note the difference between a political and a philological approach to the writings of Marx and Engels: the genuine texts are distinguished from those that were politically welcome or undesired. It is to be hoped that, as a consequence of the presentation of new textual material on the activities of Marx and Engels during the 1848 revolution and their comments on European and US politics, the journalism of Marx and Engels, which has been so marginalised, will receive due consideration in the years to come.

No less important are Marx's excerpts, which are presented in Part IV of the *MEGA*², which comprises 32 volumes, 13 of which have been published so far. The publication of volumes with study material on chemistry, geology, and diplomatic history, the edition of the ethnological excerpts, and the notebooks on economic crises [*Books of Crisis*] is under way. The manuscripts in Part IV are noteworthy because, without exception, they are first-time publications that offer insights into the intellectual laboratory of Marx and his library. They are of particular interest as they shed light on the final years of his life, during which he stopped writing in order to publish some of his manuscripts. These excerpts are of interest, too, because they document the encyclopaedic breadth of the subjects he researched.

100 Hubmann 2008.

101 Hubmann 2008, pp. 144–6.

In addition to providing new material, the excerpts are of importance for understanding and interpreting the works of Marx. Let us illustrate this with an example from *Capital*. When Marx speaks of society as a versatile crystal ('the present society is no solid crystal, but an organism capable of change, and is constantly changing'), when he speaks of fetishism or of the *Gesellschaftsformation*, it might at first glance appear as if he is using the terms just metaphorically. However, taking the chemical, geological, and physiological excerpts into consideration, it becomes evident that these are more than just metaphors, and that they should instead be regarded as instances of the formation of scientific analogies. As a consequence, the concept 'fetish' is not a metaphor (as some would still have it), but a scientific analogy by which findings from the sociology of religion are fructified for political economy. Marx is explicit on this subject: 'There is a definite social relation between men, that assumes, in their eyes, the fantastic form of a relation between things. In order, therefore, to find an *analogy*, we *must* have recourse to the mist-enveloped regions of the religious world'.¹⁰² The full meaning of this phrase can be understood only if one is familiar with the excerpts on the 'Fetish Gods' published in volume 1 of Part IV of *MEGA*². This example demonstrates that, like an acquaintance with Hegelian philosophy, the excerpts contribute substantially to our understanding of *Capital*.

In this way the publication of these excerpts and manuscripts expands and changes our view of Marx and his thought. It was therefore a very remarkable event in Marx-centred research when – after long years of philological drudgery – Part II of the *MEGA*² (*Capital* and the preliminary studies) was finally completed in 2013. Thanks to an international scholarly collaboration, all of Marx's manuscripts pertaining to *Capital*, the editorial manuscripts of Engels, and the printed editions of *Capital* are now accessible in a historical-critical edition.¹⁰³ The texts are presented in 15 volumes (eight [!] of which contain manuscripts being published for the first time) and they supply a new basis for research on the economic thinking of Marx. Large sections of the *MEGA*² *Capital* part are also accessible online on *MEGA*digital.¹⁰⁴

¹⁰² *MEGA*², II/6, p. 103.

¹⁰³ For an overview of the material, see the tables in the Appendices.

¹⁰⁴ See <http://telota.bbaw.de/mega/>. All texts and manuscripts are presented in an identical fashion to the printed volumes and thus can be cited in full. In addition, there is the possibility of cross-volume search inquiries, meaning that the text passages in the manuscripts can be compared with corresponding passages in the printed versions.

The Changing Marx Reception and This Volume

Over the years, the debate took a different turn on several occasions as new manuscripts by Marx appeared. The 'Economic and Philosophical Manuscripts of 1844' were first published in Russian by Rjazanov in 1927 as 'Preliminary studies for "The Holy Family"'; in 1932 they were published in their original in the *MEGA*¹, editorship of which had by then been assumed by Adoratsky. These texts, which were no more than a series of isolated notes and by no means comprised a completed study, were immediately received enthusiastically. Adoratsky believed they constituted a preliminary analysis of 'the real economic structure of capitalism'.

As already noted, between 1939 and 1941 the Marx-Engels Institute in Moscow published *Grundrisse* in German in two parts. Though this edition was the product of the aborted *MEGA*¹ project, it was presented as an independent publication. In 1973 Martin Nicolaus's English translation appeared. The appearance of the various editions of the first volume of *Capital* in the *MEGA*² between 1983 and 1990 were extremely important events.

While Part II of the *MEGA*² was still being prepared and new volumes were appearing, discussions about the insights the new publications might yield were already underway. In a few cases, researchers were using the original manuscripts in Amsterdam even before they had actually been published.¹⁰⁵ *MEGA*² employees contributed in part to these discussions through reflections on their work in progress. Often the publication of new volumes in the *MEGA*² prompted discussion among scholars.¹⁰⁶

One key factor in the new reception of Marx was the establishment of several theoretical working groups or networks. The International Symposium on Marxian Theory (ISMT), which has been organised annually by Fred Moseley (Mount Holyoke College, USA) and fellow ISMT members since 1990, has become very influential. Several representatives of these groups have engaged in debate with each other within the context of the symposium, and several volumes of high-quality conference papers have been published.¹⁰⁷ The periodic conferences of the German Marx-Gesellschaft held since 1993 at the ini-

105 For example, Schrader 1980 and 1983; Rojahn 1983; Müller 1992.

106 See, for example, Heinrich 1989 and 2013a; Mage 2013; Moseley 2013; Carchedi and Roberts 2013; Heinrich 2013b. Akira Miyakawa argues that the publication of Marx's economic manuscripts of 1861–3 (*MEGA*², II/3) has led to a powerful resurgence in the Japanese Marxological debate. Hoff 2017, pp. 110–12.

107 Moseley (ed.) 1993; Moseley and Campbell (eds.) 1997; Arthur and Reuten (eds.) 1998; Campbell and Reuten (eds.) 2002; Bellofiore and Taylor (eds.) 2004; Moseley (ed.) 2005;

tiative of Hans-Georg Backhaus, Diethard Behrens, and Hans-Joachim Blank have had a great impact too.¹⁰⁸

A new phase in the debate has now become possible with the completion of the 'Abteilung II' of the *MEGA*². The first overview of these new texts and their significance came in 2013 at the conference entitled 'Marx's Capital: the Complete Edition of an Incomplete Project: On Finishing the Section on Capital in the Marx-Engels Gesamtausgabe', which was held in Berlin.¹⁰⁹ Marx's economic texts, as a whole, show on the one hand that there is no such thing as a completed major work by the name of *Capital*, and that on the other hand Marx's other economic writings cannot simply be classified as 'preparatory works' which lead – as was thought when work on the *MEGA*² began – towards *Capital* in a teleological fashion. The completion of the *MEGA*²'s section on *Capital* shows that the section precisely does not reconstruct a 'work' or a final theory formation, but documents Marx's unfinished research process.¹¹⁰

This was the starting point for an international conference in Amsterdam in October 2014. The major contributions to this conference have been printed in this volume. Proven experts on, and editors of, *Capital* together attempted to evaluate the new textual foundations and to arrive at initial assessments. Carl-Erich Vollgraf ('Marx's further work on Capital after publishing Volume 1: on the completion of Part II of the *MEGA*²') provides a balance sheet of his experience of decades of work on the manuscripts. He both summarises, in eleven theses, the main features of the *Capital* project and reflects on the state of Marx's elaborations. Heinz D. Kurz ('Marx after the *MEGA*² edition: a comment') complements these internal perspectives through a comparative view of Marx's relationship to 'classical' political economy – Ricardo and Sraffa in particular.

On the basis of the now complete textual foundation of Marx's manuscripts, Regina Roth ('Editing the legacy: Friedrich Engels and Marx's *Capital*') studies the changes Engels made to the text in his editorial work for the printed versions. She sheds light on Engels's editorial methods and works out the motives guiding him as Marx's first interpreter. Following on from this, Jorge

Bellofiore and Fineschi (eds.) 2009; Bellofiore, Starosta, and Thomas (eds.) 2013; Moseley and Smith (eds.) 2014.

108 Selected papers were published in Behrens (ed.) 1999 and (ed.) 2005. See also <http://www.marx-gesellschaft.de/>.

109 The conference papers are documented in the *Marx-Engels Jahrbuch 2012/13*, Berlin 2013.

110 The title of the second section of the *MEGA*² is therefore a misnomer: 'Capital and the preparatory works'. An English translation of *MEGA*², II, 4.2 has now been published: Marx 2016.

Grespan ('About the beginning and end of capitalism. Observations on the consequences possibly derived from the discoveries of MEGA²') looks at two questions in more detail: Engels's accentuation of the fall in the rate of profit into a 'law' and how he used Marx to present his theory of crisis.

Thus we now have keywords for the central problem areas of Marxian theory, which are dealt with by Geert Reuten, Chris Arthur, Fred Moseley and Tim Grassmann. Reuten ('The redundant transformation to prices of production: a Marx-immanent critique and reconstruction') turns his attention to the transformation from values to prices of production, as developed in *Capital* Volume I, and subjects Marx's starting conditions (constraints) to an immanent critique, on the basis of which the transformation problem can be resolved. He argues that the dual account system proposed by Marx is redundant and that there is neither a transformation nor a transformation problem. Chris Arthur ('Comment on Geert Reuten'), however, insists on the dual system because the opposition between labour values and production prices is an expression of two opposing class positions.

Fred Moseley ('The development of Marx's theory of the falling rate of profit in the four drafts of *Capital*') traces the development of the theory of the rate of profit from the *Grundrisse* through the manuscript written between 1861 and 1863 and the manuscript written between 1863 and 1865 through to *Capital* Volume I. He provides a balance sheet of the state of Marx's elaboration and outlines the outstanding issues. Timm Grassmann ('Did Marx relinquish his concept of capital's historical dynamic? A comment on Fred Moseley') further expands perspectives on the debate surrounding the tendency for the rate of profit to fall by highlighting the internal relationship between the volumes of *Capital* and the French edition of the work (1872–5), in which Marx further deepened his theory of accumulation.

Alongside this discussion of key issues within *Capital*, the section of excerpts from the MEGA² which has been made available has directed our attention to further new source material for an understanding of Marx's thought. Matthias Bohlender ('Marx meets Manchester. The Manchester notebooks as a starting point of an unfinish(ed)able project?') analyses Marx's studies in Manchester in 1845, which resulted in significant impulses in Marx's thought, in which he combines the English Ricardian socialists (John Francis Bray in particular), and the critique of political economy with a critique of politics. Lucia Pradella ('Marx's itineraries to *Capital*: on Matthias Bohlender's "Marx meets Manchester"') reminds us of some of Marx's even earlier studies in the Kreuznach, Paris and Brussels volumes, within which a socialist critique of the economic classics, as well as the first concepts of class, can be found. Kenji Mori ('Karl Marx's Books of Crisis and the concept of double crisis: A Ricardian Leg-

acy') evaluates Marx's previously unpublished notebooks on the Great Depression of 1857 and in this context also reconstructs Marx's underlying concept of crisis.

Taken together, the chapters collated here can provide both an overview of the new source material and of the current research issues regarding Marx's critique of political economy. We hope and expect the present volume to be only a first step, and that much more extensive studies and debates will follow in the years to come.

Acknowledgments

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Most of the essays included in this volume were diligently edited by Jurriaan Bendien. Chris Gordon polished the English of Kenji Mori's contribution and translated part of the Introduction into English from Dutch. Ben Lewis translated several German fragments and Angela Ettema was responsible for the bibliography.

Appendix 1.1: Chronological Overview of the Manuscripts and Printed Versions of Marx's Economic Writings

'Outlines of Political Economy' (Manuscript)	1857/58	MEGA ² , II/1
On the Critique of Political Economy (Printed version)	1859	MEGA ² , II/2
Manuscript of 1861–3	1861–3	MEGA ² , II/3.1–6
Manuscripts for <i>Capital</i> Volume I	1871/72	MEGA ² , II/4.1
	1871/72	MEGA ² , II/6
	1877	MEGA ² , II/8
	1867, 1872	MEGA ² , II/5–6
Printed editions of <i>Capital</i> Volume I	1872–5	MEGA ² , II/7
	1883	MEGA ² , II/8
	1887	MEGA ² , II/9
	1890	MEGA ² , II/10
Manuscripts for <i>Capital</i> Volume II	1865	MEGA ² , II/4.1
	1867/68	MEGA ² , II/4.3
	1868–81	MEGA ² , II/11
	1884/85	MEGA ² , II/12
Printed versions of <i>Capital</i> Volume II	1885, 1893	MEGA ² , II/13
Manuscripts for <i>Capital</i> Volume III	1864/65	MEGA ² , II/4.2
	1867/68	MEGA ² , II/4.3
	1871–81	MEGA ² , II/14
Printed version of <i>Capital</i> Volume III	1894	MEGA ² , II/15

Appendix 1.2: Topics Covered in Each *MEGA*² Volume

<i>MEGA</i> ² , II/1	Money, capital, labour, the production process, reproduction, fixed and circulating capital, surplus value, interest, profit
<i>MEGA</i> ² , II/2	The commodity, money; the so-called 6-book plan
<i>MEGA</i> ² , II/3.1–6	Draft on the topics in the Volumes I and III of <i>Capital</i> that appeared later on, Theories of Surplus Value
<i>MEGA</i> ² , II/4.1	Chapter 6: Results of the Direct Production Process
<i>MEGA</i> ² , II/6	Changes to the table of contents in the 1st edition of Volume I
<i>MEGA</i> ² , II/8	Changes to the table of contents in the 2nd edition of Volume II
<i>MEGA</i> ² , II/5–6	1st edition and 2nd Edition of Volume I – The production process of capital
<i>MEGA</i> ² , II/7	French edition, Volume I
<i>MEGA</i> ² , II/8	3rd edition of Volume I (edited by Engels)
<i>MEGA</i> ² , II/9	English edition of Volume I (edited by Engels)
<i>MEGA</i> ² , II/10	4th edition of Volume I (edited by Engels)
<i>MEGA</i> ² , II/4.1	The Circulation Process of Capital (circulation, transformation [Umschlag], circulation and reproduction)
<i>MEGA</i> ² , II/4.3	Circulation, metamorphoses, transformation [Umschlag]
<i>MEGA</i> ² , II/11	The circulation process: Metamorphoses, transformation, fixed and circulating capital, circulation and reproduction, expanded reproduction
<i>MEGA</i> ² , II/12	Engels's Editorial Manuscript (The Circulation Process of Capital)
<i>MEGA</i> ² , II/13	The circulation process of capital
<i>MEGA</i> ² , II/4.2	The forms [Gestaltungen] of the process as a whole (surplus value and profit, average profit, tendency of the rate of profit to fall, commodity and money capital, interest and entrepreneurial profit, interest-bearing capital, credit, land rents, revenues)
<i>MEGA</i> ² , II/4.3	Transformation, cost price, profit and the rate of profit, differential rents

(cont.)

<i>MEGA</i> ² , II/14	Marx's Manuscripts (The rate of surplus value and the rate of profit, differential rents), Engels's editorial manuscript (The rate of surplus value and the rate of profit, money capital, interest, entrepreneurial profit, credit, the stock market, the law of value and the rate of profit)
<hr/>	
<i>MEGA</i> ² , II/15	The process of capitalist production as a whole (surplus value and profit, average profit, the tendency of the rate of profit to fall, commodity and money capital, interest and entrepreneurial profit, interest-bearing capital, credit, ground rents, revenues)

Editing the Legacy: Friedrich Engels and Marx's *Capital**

Regina Roth

Introduction

Portraying Karl Marx's *Capital* in his 'History of Economic Analysis', Joseph Schumpeter emphasised that 'the totality of his vision, as a totality, asserts its right in every detail and is precisely the source of the intellectual fascination experienced by everyone, friend or foe, who makes a study of him'.¹ In our own time, we could add a new facet to this observation, since the part which Friedrich Engels played in finalising Marx's *magnum opus* has now been disclosed by a historical-critical edition of the text. It was Engels who edited the 3rd and 4th edition of Volume I, as well as the English edition. And it was Engels who, for more than a hundred years, had given shape to the numerous manuscripts which Marx left after his death: manuscripts of differing lengths, and dating from different periods in the 1860s and 1870s, written for Book 2 and 3 of *Capital*.² Consequently, it was Engels who made it possible to read and

* I would like to thank the conference participants in Amsterdam for their valuable discussion, and especially Jorge Grespan for his inspiring comments. I also thank Ian Whalley and Jurriaan Bendien who checked my English. Responsibility for the final text is, of course, my own.

1 Schumpeter 1994, p. 384.

2 At the beginning of the 1860s, Marx envisaged writing three 'sections' for *Capital* (*MEGA*² 11/3.5, p. 1861; *MECW*, vol. 33, p. 346 f.). In 1866, he then decided to write four books on *Capital* which would appear in three volumes: Volume I was planned to contain the first book on the 'process of production of capital' as well as the second book on the 'process of circulation of capital'; Volume II was to comprise the third book on the 'structure of the process as a whole'; and Volume III – the fourth book – 'on the history of the theory' (Marx to Louis Kugelmann, 13 October 1866; *MECW*, vol. 42, p. 328). After having finished the first book, Marx decided to publish this one as his first volume. He then wanted the second and third book to follow in Volume II, and to close his work with the fourth book, which would be Volume III (Marx to Sigfrid Meyer, 30 April 1867; *MECW*, vol. 42, p. 367; see also Preface to *Capital* Volume I, *MECW*, vol. 35, p. 11). This division of his work remained valid for Marx until the end of his life. It was not until Engels published the second book as Volume II, and the third book as Volume III,

absorb Marx's work as a unity of three Books – as a work dealing with the production, circulation and distribution of capital.

Retrospective work on the various manuscripts has drawn attention to another aspect of Engels's role in the history of *Capital*: the manuscripts that Marx had left were in a very fragmentary state. As a result, Engels had to alter what remained considerably, in order to present it in a form that could be read and 'consumed' by the public. One of the first to inform the readers about this material was Maximilien Rubel, who translated or summarised parts of it for his French edition of Marx's *Œuvres* in 1963.³ The *MEGA*² has now made available all of the surviving manuscripts and all of the published versions of *Capital*. Thus, for the first time, the entire material has been reviewed systematically and comprehensively. It is presented in its original language, and provides a wealth of supplementary information, whether it be about Marx's (or Engels's) sources, or about the connection between different versions of the texts. I think that the most important benefit for readers is that each and every one of the findings which *MEGA*² presents can be definitely traced and verified.⁴

The achievement of the *MEGA*² presentation of the manuscripts of *Capital* is, in my opinion, twofold. First, we have identified Marx's texts, the subjects he dealt with, the methods, and sources he used for his analysis. Second, we have identified Engels's modifications – what he changed, and to what extent, and how, in general, he acted as the first interpreter of Marx. The examination of the differences between the manuscripts and the published versions of *Capital* has intensified considerably since the publication of Marx's manuscript for Book 3 in *MEGA*² 11/4.2. I will present a brief survey of debates about this comparison, as well as some conclusions, to give an impression of the new foundation which the *MEGA*² has created for discussions about Marx's work and thoughts.

Engels's Problems in Editing Marx's Texts

Friedrich Engels worked for more than a decade on the voluminous legacy of Karl Marx's *Capital*. After Marx's death in 1883, Engels published the 3rd German edition of Volume I (*MEGA*² 11/8), in 1885 followed Book 2 as Volume II

that today's view of *Capital* as being divided into three volumes was created. I therefore use 'Book 2' and 'Book 3' as the unequivocal terms to denote the respective parts of *Capital*.

3 Maximilien Rubel presented these parts in the second of his two volumes on 'Économie' (Marx 1968, p. 501ff.).

4 *MEGA*² 11/4–11/15. For a short overview on the contents of these *MEGA*²-volumes, see Hubmann and Roth 2013, p. 60ff. and the appendix to this volume's introduction.

(*MEGA*² 11/13), in 1887 the English edition of Volume I (*MEGA*² 11/9), in 1890 the 4th German edition (*MEGA*² 11/10), and eventually, in 1894, Book 3 as Volume III (*MEGA*² 11/15).

Before discussing Engels's editorial work in more detail, the material Marx left behind can be summarised in a few words: a large pile of manuscripts about specific topics and about parts of his work, well-argued and articulated passages being juxtaposed with poorly structured chapters or excerpts, and considerations intended only to clarify Marx's own position. In all, about 1,500 pages of manuscripts written for Book 2 and 3 have come down to us. Looking more closely at this material, Marx appears to have been obsessed with revising and collecting. Alas, there are also missing texts about some crucial questions. Thus, several important matters were left open. Among them were: the laws governing the movements of the rate of profit; the substitution of constant capital in the section producing means of production; the role of money in the reproduction process; the role of credit for production and reproduction; ground rent; expanded reproduction; and crises. Moreover, Marx made various modifications only in the French edition of Volume I of *Capital*, which had not yet been integrated into the 2nd German edition of this part of his work. Apart from the French edition, he had left several lists and marginal notes in copies of Volume I, documenting his ideas and alterations.⁵ In all, Marx had worked on all parts of *Capital* in his last decade, after the publication of Volume I in 1867 (*MEGA*² 11/5), and therefore he left a large but unfinished body of work, a work in progress.

Engels's View of Marx's Texts

When publishing Marx's manuscripts dealing with Books 2 and 3 of *Capital*, Engels always focused on presenting 'as far as possible, an authentic text, showing the results which Marx had brought to light in, as far as possible, Marx's own words', as he wrote in his supplement on the law of profit and the rate of profit in 1895.⁶ Engels was convinced that 'Marx's original text was the most important thing' (*ibid.*) for a discussion about and application of Marx's theories. At the same time, we can observe a change in his view of Marx's texts while working on the manuscripts: from his original intention to refrain from

5 Thomas Kuczynski has described this material profoundly; he will use his insights in preparing a new edition of Volume I, based on the *MEGA*² (see Kuczynski 2011 and 2013).

6 *MEGA*² 11/14, p. 323; *MECW*, vol. 37, p. 875. Similarly, Engels to Petr Lavrov, 28 January 1884 (*MECW*, vol. 47, p. 87 ff.).

modifying their contents – or, at most, to make possible modifications ‘only in the spirit of the author’, expressed in the preface to Volume II of *Capital*⁷ – to the subsequent appraisal that, in particular, the third book was a ‘first draft’ which was ‘sketchy’, and in many parts only expressed ‘thoughts and ideas written down *in statu nascendi*’.⁸ Moreover, Engels considered himself entitled ‘to bring it out in a shape in which the whole line of argument stands forth clearly and in bold relief’, as he wrote to Nikolai Danielson on 4 July 1889.⁹

In general, Engels proceeded very carefully while preparing Marx’s manuscripts for publication. He looked through all of the manuscripts, as well as Marx’s letters and notebooks, to obtain information about Marx’s intentions for finishing his work. However, Engels appears to have been more sceptical about Marx’s instructions about the French edition as the basis for new editions of Volume I of *Capital*. This can be seen in the English translation in 1887 (*MEGA*² II/9) as well as in the fourth German edition in 1890 (*MEGA*² II/10).¹⁰ Marx made clear in different ways, also quasi ‘face to face’ with Engels, that the French edition from 1872 to 1875 had its own scientific value alongside the original, and should be the basis for future editions.¹¹ In contrast, Engels contended in letters to Marx¹² that the French language was ‘elegant’, but lacked command of the strength and faculties of the German language used in the original. He wrote to Marx on 29 November 1873: ‘its vigour and vitality and life have gone to the devil’.¹³ In his later letters to Friedrich Adolph Sorge,¹⁴ Engels admitted he considered the French edition as a simplification, or perhaps even a degeneration: he used the word ‘Verflachung’¹⁵ – in today’s vernacular, ‘a dumbing down’. Engels warned Marx in November 1873 that it would be ‘a great mistake’ to use the French edition as a basis for other translations.¹⁶

7 *MEGA*² II/13, p. 8; *MECW*, vol. 36, p. 9.

8 Engels in his preface to Volume III of *Capital*; *MEGA*² II/15, p. 7; *MECW*, vol. 37, p. 6f. Similarly, Engels to Werner Sombart, 11 March 1895 (*MECW*, vol. 50, p. 460 ff.).

9 *MECW*, vol. 48, p. 347.

10 The third edition, which Marx began to work on, was essentially a reprint of the second edition with only very few modifications. This circumstance may be attributable to the short time Engels took in making this edition ready for the publisher.

11 Anderson 1983, pp. 73 ff.; Anderson 2010, pp. 173 ff.; Kuczynski 2013, pp. 192 ff.; see also Marx 1963, where Rubel offers detailed information in his notes about the concrete differences between the French and German editions.

12 Engels to Marx, 29 November, 5 December 1873 (*MECW*, vol. 44, pp. 539 ff., 544 f.).

13 *MECW*, vol. 44, p. 540.

14 29 June 1883; 29 April 1886 (*MECW*, vol. 47, pp. 42 f., 439 ff.).

15 *MEW*, vol. 36, p. 476.

16 *MECW*, vol. 44, p. 541.

Engels's Modifications to Marx's Texts

In 1890, in the preface of the fourth German edition of Volume 1, Engels assured his readers that he had compared the German and French versions of this Volume 1 to establish 'in final form, as nearly as possible, both text and footnotes'.¹⁷ However, a comparison of both versions demonstrates that various considerable textual modifications which Marx had included in the French edition are missing in Engels's editions.¹⁸

When compiling the published versions of the missing Books 2 and 3 of *Capital* out of Marx's papers, the rather unfinished manuscripts left a margin of interpretation for Engels which he used in structuring and revising passages, often for the benefit of the readers. In retrospect, when comparing the manuscripts to the published versions, numerous differences appear. Carl-Erich Vollgraf and Jürgen Jungnickel were the first to identify and classify them systematically.¹⁹ According to their classification, the variations arose from:

- Adjusting different uses of terms, notations, or numeric examples.
- Rearranging passages.
- Transferring text originally stated in footnotes to the flow of the main text.
- Structuring text, together with the addition of headings and introductory passages, and inserting new paragraphs.
- Omitting passages.
- Updating information and evidence.
- Removing emphasis on phrases.
- Examining and correcting arithmetic.
- Inspecting and translating quotes.
- Changes of style.²⁰

Once the numerous variants are identified, they can be grouped in four categories: structuring the text and ordering Marx's terms and ideas; mitigating inconsistencies; shifting emphasis; and disregarding variations.

17 *MEGA*² 11/10, p. 22; *MECW*, vol. 35, p. 37 (see <http://telota.bbaw.de/mega/#>).

18 Engels also left out the French afterword, where Marx had pointed to the importance he attached to this French edition (*MEGA*², 11/7, p. 690).

19 Vollgraf and Jungnickel 2002. The original article was published in *MEGA-Studien* 1994/2 in 1995.

20 Vollgraf and Jungnickel 2002. For a detailed survey with many examples, see also *MEGA*² 11/14, pp. 407–31; Roth, in Bellofiore and Fineschi (eds.) 2009, p. 41 ff.

1 *Structuring the Text and Ordering Marx's Terms and Ideas*

In the French edition (*MEGA*² 11/7), Marx had resolved to make several changes in the structure of Volume 1. Especially with regard to the last section, he decided to dedicate a separate section to the 'so-called primitive accumulation'. In general, he believed that future editions should be structured according to the French translation.²¹ Engels did not oppose this approach in the English edition in 1887, translated by Samuel Moore and Edward Aveling (*MEGA*² 11/9). Both editions consist of 33 chapters in eight parts. Despite this, Engels appears to have applied his scepticism of the French edition in preparing the 4th German edition (*MEGA*² 11/10). He did not make use of the more detailed structure, e.g. with regard to the last part, and he also ignored changes in the first two parts. Yet, for this decision, he could find support in Marx's guidelines for a Russian translation, in a letter to Nikolai Danielson, dated 28 November 1878.²²

On the other hand, with the more detailed structures for Books 2 and 3, Engels introduced a modification to the parts and chapters that Marx had used for the 2nd edition of Volume 1 in 1872/73.²³ As headings rarely appeared in Marx's manuscripts, Engels looked for indications in Marx's text where such additional structures could, or should, be used. Nonetheless, Engels had a large range of options to choose from, and I will draw attention here to some striking modifications to the structure, inspired more by Engels than by Marx.

There is only one draft in existence where Marx analyses expanded reproduction, the subject of the last chapter in Book 2 of *Capital*, written probably between 1879 and 1881.²⁴ This text came into existence more as a compilation of ideas and arguments written down before they were forgotten than as a text designed to deal with specific problems in a form that could or should be published. The text was poorly structured. Marx often separated his vari-

21 'I wish that the *divisions into chapters* – and the same holds good for the *subdivisions* – be made according to the French edition' (Marx to Nikolai Danielson, 15 November 1878; *MECW*, vol. 45, p. 343).

22 *MECW*, vol. 45, p. 346 f.

23 The second edition was delivered in nine fascicles, appearing from the end of July 1872 to mid-May 1873 (*MEGA*² 11/6, p. 1120).

24 *MEGA*² 11/11, pp. 790–825 (see also p. 1606, 1610 f.). The text of *MEGA*² 11/11 is available online, together with the texts of seven other *MEGA*² volumes, containing several other manuscripts for and published versions of *Capital* as well as the *Grundrisse* (see <http://telota.bbaw.de/mega/>).

ous thoughts only by long horizontal lines.²⁵ One of the rare headings indicates that Marx turned to dealing with 'accumulation or production on an expanded scale'.²⁶ Marx's text is further subdivided only by the numbers '1)' to '4)', and '5) Accumulation in class 11'. Thus, it was Engels who structured this chapter into subdivisions. In so doing, he concealed Marx's train of thought, and the character of the exposition. Only in the original manuscripts, as Teinosuke Otani and Carl-Erich Vollgraf argue in their introduction to these manuscripts, can it be observed that Marx was not giving a 'positive presentation' of the mechanisms which resulted in an expanded reproduction. Rather, Marx was recapitulating the theoretical 'difficulties' – as Marx called them himself²⁷ – while looking for new solutions, and, sometimes, identifying new questions he wanted to deal with.²⁸

It has also become apparent that the manuscript for Book 3 was poorly structured, and that it was Engels who inserted many of the headings for chapters and subchapters.²⁹ Engels was editorially mainly active in parts 1,³⁰ 3,³¹ and 6.³² In particular, it was the third section of Book 3 (dealing with the law

25 *MEGA*² 11/11. For example, the first heading being 'Ch[apter] 111) b[ook] 11)' was probably added in a later stage of writing (*MEGA*² 11/11, p. 698, 1609).

26 *MEGA*² 11/11, p. 790. In full, this heading started with 'Anticipated. 11)' (see *MEGA*² 11/11, p. 790), corresponding with another heading 'Anticipated for later [subjects]' [in the German original: 'Anticipiertes für das Spätere'] (*MEGA*² 11/11, p. 728). This diction probably points to Marx expressing his intention to add these parts to other drafts, either already existing or still to be written.

27 For example, *MEGA*² 11/11, p. 710, 751, 756, 758, 793, 804.

28 For a detailed discussion, see *MEGA*² 11/11, pp. 873–81. For an illustration, see also the many variations which Marx used in setting up the reproduction schemes; Engels condensed them in only a small number of schemata, in his version of Book 2 of *Capital* (*MEGA*² 11/12, pp. 526–9; see also Mori 2006).

29 *MEGA*² 11/15, pp. 919–24.

30 In this section, Marx's drafts had severe deficits with regard to structure as well as content. Therefore, Engels condensed the more than 200 pages from different manuscripts into about 20 pages in the third chapter of Volume 111. He systematised the argument, established two main factors, and selected a few of the many numerical examples to discuss the potential cases. Geert Reuten observed that Engels left out all of Marx's examination related to variations of the rate of surplus value, together with variations in the composition of capital (Roth, in Bellofiore and Fineschi (eds.) 2009, p. 43).

31 This section was the least worked out by Marx. For Engels's editorial work, see *MEGA*² 11/14, pp. 472–7.

32 Here, Engels in general followed an outline which Marx gave at the end of the sixth chapter (*MEGA*² 11/4.2, p. 816f.). Moreover, Engels transferred material from the beginning of Marx's chapter to the end, and presented it under a new heading: 'Genesis of capitalist

of the tendential fall in the rate of profit) which has already provoked several commentaries. Early on, Geert Reuten emphasised that Marx did not explicitly talk of a 'law as such', and he pointed out Marx's 'rather ambiguous' use of the notion of 'law'.³³ This structuring work was closely intertwined with Engels's additions of transitions, and transitional phrases. Directly at the beginning of Volume III, an example of this can be found: its very first sentences were written by Engels.³⁴

2 *Mitigating Inconsistencies*

As is well-known, Marx 'thought on paper'. This also meant, for example, that he advanced postulates or expressed intentions at the beginning of a paragraph or chapter. This did not prevent him from changing his premises when, in the course of his examination, he found additional evidence or material contradicting them. Thus, within his fifth chapter of Book 3, he begins to make a point on credit and fictitious capital, and starts with the statement that he will refrain from an analysis of the real movement of the credit system and the instruments it creates.³⁵ Yet, there is also ample evidence that he wanted to deal in depth with credit in this same chapter. In subsequent pages, he gathered a lot of material on the credit system, including numerous excerpts which present only a collection of ideas and facts still awaiting full interpretation. Later on, he indicated – more than once – that his fifth chapter should be 'the' chapter on credit.³⁶ Moreover, he stated in a later manuscript for Book 2 that capitalist production needed credit for development, and he considered in the French edition of Volume I that credit developed into an immense social machinery to centralise capital.³⁷ These facts subsequently convinced Engels in his ver-

ground rent' (*MEGA*² 11/4.2, pp. 723–53; *MEGA*² 11/15, pp. 757–88; *MECW*, vol. 37, 768–800), in a striking analogy to similar historical chapters in Volume I about the genesis of the capitalist tenant farmer and of the industrial capitalist (Vollgraf and Jungnickel 2002, p. 44).

33 Reuten, in Campbell and Reuten (eds.) 2002, p. 179.

34 *MEGA*² 11/15, p. 29 and 'Verzeichnis inhaltlich bedeutsamer Zusätze von Friedrich Engels', *MEGA*² 11/15, p. 975; for the English text, see *MECW*, vol. 37, p. 27. For further examples, see Vollgraf and Jungnickel 2002, p. 52 ff.

35 *MEGA*² 11/4.2, p. 469; see also *MEGA*² 11/4.2, pp. 431 and 853.

36 Marx to Engels, 30 April 1868 (*MECW*, vol. 43, p. 20 ff.); for further evidence, see the account of Marx's work on Book 3 of *Capital* in *MEGA*² 11/14, pp. 445 f.

37 *MEGA*² 11/11, p. 335; *MEGA*² 11/7, p. 547. In the edition of 1867, Marx had still spoken of a 'specific machine for the concentration of capital' (*MEGA*² 11/5, p. 505; this *MEGA*² volume is available online: <http://telota.bbaw.de/mega/>). See also Vollgraf 2006, p. 13 f., 22.

sion of Book 3 of *Capital* that he should change the sentence from Marx's manuscript to say that 'a *detailed* analysis' lay outside the plan of this work.³⁸ Engels performed a similar alteration in the first section of Book 3. There, Marx also affirmed that 'the phenomena analysed in this § [about devaluation and revaluation of capital] require for their full development the credit system and competition on the world-market', concluding that these forms could 'only be presented' after the general nature of capital was understood; such an analysis, however, fell outside the plan of his book and belonged to a continuation.³⁹ Engels changed the sentence in the published version to say these phenomena could 'only be *comprehensively* presented' in the way Marx had described.⁴⁰ Heinrich suggests that these modifications point to Engels's edition offering 'a mere encyclopaedical collection', in contrast to 'the dialectically structured presentation which was Marx's aim'.⁴¹

Geert Reuten presents another case, based on his comparison of Marx's manuscript and Engels's published version of Book 3 of *Capital*. In the second chapter/part, Reuten identifies two alternative and conflicting methods to form a general rate of profit which Marx used for his examination of the subject. In Marx's original text, it was apparent that there were problems with these methods, and that Marx was aware of them. However, in his edition, Engels 'polished away most of Marx's worries'.⁴²

The last manuscript which Marx wrote for *Capital* has already been mentioned. To deal with expanded reproduction, Marx used several schemata to trace the development of the different departments during the process of reproduction and accumulation.⁴³ In his manuscripts – at least in those that were not written with a view to publication – Marx often did not explicitly state the premises for his numerical examples. Sometimes, he seemed to be discouraged by calculation errors, and dropped the subject. This appears to have been the case in the important part of his last manuscript, in which Marx developed some hypotheses and numerical examples while attempting to analyse a pro-

38 *MEGA*² 11/15, p. 389 (my emphasis); *MECW*, vol. 37, p. 397. See Vollgraf and Jungnickel 2002, p. 58f.; Heinrich 1996–7, p. 461; Heinrich 2011, pp. 289 ff.

39 *MEGA*² 11/4.2, p. 178.

40 *MEGA*² 11/15, p. 114 (my emphasis); *MECW*, vol. 37, p. 112.

41 Heinrich 1996–7, p. 462. In this article, another example is introduced, to show a modification by Engels which had an effect on Marx's method of presentation (Heinrich 1996–7, p. 460).

42 Reuten, in Bellofiore and Fineschi (eds.) 2009, p. 229, see also p. 221.

43 *MEGA*² 11/11, pp. 790–825, see also pp. 873–81.

cess of accumulation.⁴⁴ Kenji Mori has pointed out that in the case presented here, Marx made some mistakes in his examples; he failed to identify them, and subsequently he discontinued his reasoning. Engels however noticed that these schemata could easily be corrected – which he did, in the published version in 1885 (*MEGA*² 11/13). He neither mentioned the mistakes in the original, nor the hypotheses or conclusions resulting from these examples. At the end of his example, he just stated – as Marx also had done – that total capital and total surplus value had grown. However, this modified example made it possible to interpret Marx as a precursor of the theory of balanced economic growth.⁴⁵

3 *Shifting Emphasis*

The fragmentary state of the original manuscripts provided Engels with a margin to modify the wording. That could result in a shift of emphasis, as the examples that follow will illustrate. Some indications for such shifts can be discerned in the discussion on the tendential fall of the rate of profit in the third chapter of Marx's Manuscript 1864/65. It was Engels who inserted in the later chapter on 'The Law as Such', the explicit statement: 'But in reality ... the rate of profit will fall in the long run'.⁴⁶ Engels inserted it after Marx considered the conditions in which the rate of profit could remain constant, or even rise. Unlike Engels, Marx did not explicitly rule out such cases in his own text, and left the question open.⁴⁷

As described elsewhere, it was Engels who connected the term 'breakdown' with the probable future of capitalist production in Book 3 of *Capital*.⁴⁸ This observation is supported by another passage, which discusses the effects of an increasing productivity of labour. There exists a version of Marx's text which Engels reworked, and presented as a 'supplementary remark' to this third chapter. What is remarkable in Engels's addition is the conclusion which Engels drew: a capitalist who does not introduce a (labour-saving) machine misses the 'historical mission' of the capitalist mode of production, viz. 'to expand

44 *MEGA*² 11/11, pp. 810–4.

45 Engels's version: *MEGA*² 11/13, pp. 474–7; for the comparison with Marx's manuscripts, see the editors' introduction to *MEGA*² 11/13, pp. 543–5.

46 *MEGA*² 11/15, p. 227, 977; *MECW*, vol. 37, p. 228.

47 *MEGA*² 11/4.2, p. 319; see also Reuten 2002, p. 179. Incidentally, Marx's considerations were part of a passage in square brackets. Marx often used square brackets to indicate that what followed had to be thought over another time, whether with regard to the content, or to the proper place to make the argument.

48 *MEGA*² 11/15, pp. 243, 13–15 and the corresponding annotation on p. 1077; for the text see *MECW*, vol. 37, p. 245; Vollgraf and Jungnickel 2002, p. 62; Heinrich 2011, p. 360.

the productivity of human labour'. Therefore, Engels continued, the capitalist mode of production 'is becoming senile and has further and further outlived its epoch'.⁴⁹ This is one of the rare comments on the future of capitalism, but it was made by Engels, and not by Marx.

The relationship between the theory of the falling rate of profit and Marx's crisis theory also offers some evidence for shifts of emphasis, when comparing the manuscripts of Marx to the published version by Engels. Michael Heinrich argues that, in the course of his economic studies since 1857, Marx discussed several approaches to analysing and explaining economic crises, with varying ideas as well as methods. This also applies to the end of the third chapter for Book 3, in Manuscript 1864/65, where Heinrich identifies various considerations on crisis, without Marx deciding which one he preferred. Engels revised these considerations, in an attempt to offer the reader most of Marx's thoughts and arguments, in a readable way. In Heinrich's view, Engels's edition at least implies the idea that Marx intended to present a theory of crisis within the framework of the falling rate of profit – a theory that was, however, unfinished. In addition, Heinrich draws attention to Marx's further considerations about crises in the fifth chapter/part of Book 3 of *Capital*.⁵⁰

In his detailed comparison of Marx's original text and Engels's edition of Book 3 of *Capital*, Geert Reuten points out two different, if not conflicting interpretations of Marx's ideas on the rate of profit, as presented in the third chapter/part of Book 3: a 'theory of cyclical development' and a 'theory explaining trend'. Both views are present in Marx's text, but according to Reuten, Engels's modifications in chapter 13 to 15 appear to emphasise more strongly the second 'theory explaining trend' interpretation, whereas Marx's original text offers more evidence for an interpretation of cyclical development. In consequence, this would make an important difference with regard to the future of the capitalist system.⁵¹

49 *MEGA*² 11/15, pp. 258f.; *MECW*, vol. 37, pp. 260f.; see also Kurz 2010b, p. 1206ff.

50 Heinrich 2007, p. 77f.; Heinrich 2013a, p. 25ff. The fifth chapter/part deals with interest-bearing capital and credit, which were to be taken into account for an analysis of the demand for investment and for the accumulation process as factors influencing crises. Earlier on, Heinrich pointed out several options present in Marx's draft which could be used to establish arguments for a theory of crisis. The presentation which Engels chose drew the attention of the readers exclusively to one of these options, a theory of crisis based on the law of the falling rate of profit (Heinrich 1996–7, p. 459).

51 Reuten 2002, pp. 180ff.; Reuten 2004, p. 163. See Thomas and Reuten 2013 for a more detailed analysis of the development of these different approaches in Marx's texts since the *Grundrisse* from 1857–8. They discuss their assumption that 'Marx's views ... developed

Shifts of emphasis are also discernible in differences between the French edition of Volume I, and the 3rd and 4th German editions. In one case, Engels accepted an alteration which Marx had explicitly ordered for the third edition, but Engels's solution appears to be somewhat questionable. In the French edition, looking at a tendency for wages in capitalist production to diminish, Marx drew attention to the need to take global developments into account, and not just the European dimension. Accordingly, he explained that not only the competition between France and the Netherlands made wages fall in England, but that China would soon determine the level of wages. In Marx's words: 'Il ne s'agit plus seulement de réduire les salaires anglais au niveau de ceux de l'Europe continentale, mais de faire descendre ... le niveau européen au niveau chinois'.⁵² In his instructions for a third edition, he underlined that this view should be inserted: '*einzuschieben ... über die Herabdrückung auf den chinesischen Standpunkt*'.⁵³ Engels added the new formulation, but only in an abbreviated form, in a footnote,⁵⁴ and not in the flow of the main text, as Marx had done in the French edition. Nor did Engels articulate the point as clearly as it was in the French edition.⁵⁵ In the 4th German edition, Engels also ignored a similar global dimension in describing the processes of replacing groups of workers in a developing capitalist economy. Marx had added in the French edition, that replacements, along with men by women, and adult workers by juveniles, also occurred between 'un Yankee' and 'trois Chinois'.⁵⁶ Such alterations can be interpreted as a shift of emphasis, with Engels weakening the emphasis which Marx had placed on his argument.

Sometimes, a difference of only one letter changes the meaning. In Book 2, Marx had written in his Manuscript II about a concentration of masses of capital 'in weniger Händen', i.e. 'in fewer hands';⁵⁷ in his published version from 1885, Engels offered the reading of a concentration of masses of capital

... from a law about the historical destination of the capitalist system as tending towards breakdown, into a theory about the functioning of the capitalist mode of production as a potentially durable system' (p. 312, see also p. 323 f.). See also Vollgraf and the comment by Kurz (both in this volume).

52 *MEGA*² 11/7, p. 522 f.

53 *MEGA*² 11/8, p. 14.

54 *MEGA*² 11/8, p. 564, note 53; *MECW*, vol. 35, p. 596 f., note 5.

55 Anderson 1983, pp. 73 ff.; Pradella 2011, p. 92.

56 *MEGA*² 11/7, p. 558. For the fourth German edition, which was based on the second German edition from 1872 (*MEGA*² 11/6, p. 579), see *MEGA*² 11/10, p. 570; *MECW*, vol. 35, p. 629. The English edition from 1887 followed this version (*MEGA*², 11/9, p. 550).

57 *MEGA*² 11/11, p. 210.

'in wenigen Händen',⁵⁸ that is, 'in the hands of a few'. It could be a slip of the pen, or a mistake in deciphering Marx's handwriting. Yet it might also be, as Carl-Erich Vollgraf has suggested, a shift of emphasis, in that Engels assigned 'a bit more speed' to the process of concentrating capital than Marx had done.⁵⁹

4 *Disregarding Variations*

Another effect of Engels's editing was that variations were disregarded. Accordingly, while they appear in Marx's manuscripts, they are missing in the published versions presented by Engels. Kenji Mori has drawn attention to a rather extensive variation documenting Marx's scrutiny of his own analysis, which is only to be found in Marx's own papers. In Manuscript II, dedicated to the reproduction process in Book 2 of *Capital*, Marx developed a very detailed reproduction model, comprising not of two, but of six departments. In about 50 pages of his manuscript,⁶⁰ he discusses the transfer of products between these departments and the money necessary for these transfers; the way in which surplus value is achieved in the different departments; and the conditions for equilibrium between these departments. Marx also asks the question of how these processes functioned, after the equalisation of the rate of profit. After a few lines, he breaks off his discussion, leaving this problem for a later examination, which never transpired.⁶¹

There are also other examples which demonstrate Marx's method of balancing reasons and arguments very carefully, while Engels nevertheless did not transfer those to the published versions in all their detail. In Book 3 of *Capital*, in the chapter discussing the counteracting causes to the falling rate of profit, Marx dealt with savings of means of production, particularly of raw materials. He defined them as a counter-tendency to the fall in the rate of profit because, while the value of raw materials may fall considerably, quantities used in production might increase. Within these considerations, Marx noted (in square brackets) that there also were factors limiting this counter-tendency.⁶² In the published version of 1894, Engels left out that note.⁶³ Similar qualifications may be present in a later manuscript by Marx, dealing with the relationship between

58 *MEGA*² 11/13, p. 232; *MECW*, vol. 36, p. 251.

59 Vollgraf 2006, p. 32.

60 *MEGA*² 11/11, pp. 443–522.

61 Marx's manuscript: *MEGA*² 11/11, p. 495. For a first examination of Marx's analysis, see the editors' introduction to *MEGA*² 11/13, pp. 540–3; see also Mori 2009.

62 *MEGA*², 11/4.2, p. 305. See also Schefold 1976, p. 817f. pointing to a corresponding passage in Marx's *Manuscript 1861–63* (*MEGA*², 11/3.5, p. 1809f.; *MECW*, vol. 33, p. 291).

63 *MEGA*², 11/15, p. 233; *MECW*, vol. 37, p. 234.

the rate of profit and the rate of surplus value, a manuscript which Engels only rarely used in presenting the third chapter of Book 3 of *Capital*. Michael Heinrich suggests that this manuscript of Marx, together with a note Marx wrote down for the 3rd edition of Volume 1 of *Capital*, offers evidence for essential changes which should have taken place, if Marx had rewritten his Book 3.⁶⁴

In another place in Book 3, Marx remarked that the poverty of the masses was to be considered as the 'ultimate reason for all real crisis'.⁶⁵ This passage has been read as evidence that Marx advocated an underconsumption theory for crises; yet in Marx's draft, this statement stood in square brackets. Thus, it is not clear whether its contents were intended to be an 'addition' to the actual argument, a 'reflection' to be further thought through, or just a 'remark'. In the published version, Engels eliminated the brackets, integrating the content into Marx's considerations on the disturbances of production.⁶⁶ Looking at the credit theory in Book 3 of *Capital*, Heinrich perceives a similar phenomenon. In Marx's manuscript, many passages and diverse considerations show that Marx was not yet decided whether 'laws regulating credit can actually be discussed on the highly abstract level of *Capital*, or whether they are linked to a number of historically specific institutional factors'. Engels decided to offer all material from Marx's text, thus making it possible to argue that Marx 'had unduly generalized specific historic conditions of the credit system in 19th century England'.⁶⁷

With this view about the manuscripts for Book 2 and 3 in mind, the substantial differences between the French edition of Volume 1 and the 3rd and 4th German editions of *Capital* also appear in a new light.⁶⁸ Some of the alterations in the French edition may be interpreted as Marx's own reservations about his earlier view of capitalist production as the only path of development that each and every nation or economy would share, then or in future. There are two passages in *Capital* that have been quoted about this opinion: one passage in the preface, the other in the last part about 'primitive accumulation'. In both places, Marx differentiated his formulations about the 'followers' of the leading industrial country, England. According to the early 1867 version of the preface, all 'less developed' countries saw their own future in the development of England,

64 Heinrich 2013a, p. 28; see also Roth, in Bellofiore and Fineschi (eds.) 2009, p. 33f.

65 MEGA² 11/4.2, p. 540.

66 MEGA², 11/15, p. 480; MECW, vol. 37, p. 483; Vollgraf and Jungnickel 2002, p. 49; Heinrich 1996–7, p. 458.

67 Heinrich 1996–7, p. 462f.

68 For further differences between the French and other editions of Volume 1, see also the comment of Timm Graßmann (this volume).

as the most developed country at the time; according to the later French version, only 'those which follow it [England] on the industrial path' saw their own future (69).⁷⁰ When presenting the section on the 'so-called primitive accumulation' in the French edition, Marx explicitly restricted his conclusions to 'the countries of Western Europe'.⁷¹ These alterations suggest that Marx left room for alternatives to capitalist production, especially in non-Western-European countries, although without further comments on these alternatives. Engels disregarded these modifications, and used the same texts as in the first German edition.⁷²

Another differentiation concerns some conditions for a general crisis which Marx only added to the French edition, and which Engels did not transfer to the 4th German edition. When discussing the existence and the necessary ongoing existence of an industrial reserve army of workers, Marx also touched on the phenomenon of credit expansion and contraction, as the only indicator of crisis recorded by political economists. In the French edition, Marx replaced this passage with a whole new paragraph which qualified the conditions that would lead to a general crisis in more detail – as the last stage in a cycle and, at the same time, the first phase of the next crisis. Marx mentioned the following conditions: the dominance of industrial production; strong foreign trade dominating the domestic trade; a world market featuring markets especially in the New World; and numerous participants in the world market.⁷³

69 *MEGA*² 11/5, p. 12; *MECW*, vol. 35, p. 9; *MEGA*² 11/7, p. 12.

70 *MEGA*² 11/5, p. 12: 'Das industriell entwickeltere Land zeigt *dem* minder entwickelten nur das Bild seiner eignen Zukunft!' (my emphasis); *MEGA*², 11/7, p. 12: 'Le pays le plus développé industriellement ne fait que montrer à *ceux qui le suivent sur l'échelle industrielle* l'image de leur propre avenir' (my emphasis).

71 *MEGA*² 11/7, p. 634. The context of this phrase is that there had been a radical form of expropriation of peasants only in England. 'Mais *tous les autres pays de l'Europe occidentale* parcourent le même mouvement ...' (my emphasis).

72 *MEGA*² 11/10, p. 644 and *MEGA*² 11/9, p. 622; *MECW*, vol. 35, p. 707. Maximilien Rubel already pointed out this variation in his edition of Marx's works (Marx 1963 p. 1170 f. and a note on p. 1701). There is other evidence from Marx's letters and articles, discussed by several authors; apart from that, Marx's growing interest in the development of the United States of America and Russia could be mentioned as a sign for a limited role for Britain as the 'leading capitalist country' (see *MEGA*² 11/14, p. 452; Anderson 2010, p. 176 ff.).

73 Marx's version: *MEGA*² 11/7, p. 557; Engels's version: *MEGA*² 11/10, pp. 568 f.; *MECW*, vol. 35, pp. 627 f. It also did not appear in the English translation of 1887 (*MEGA*² 11/9, p. 548).

Conclusion

Engels was very careful with Marx's original texts. He endeavoured to make Marx's text available using Marx's own words, and to stay true to the 'spirit of the author'.⁷⁴ In so doing, Engels performed an important service to make Marx's manuscripts known to a broader public, and he laid the foundation for the way in which they have been read, researched and responded to since.

However, Marx's analysis was in a very fragmentary state, in which large parts proved to be more a 'documentation of research' than a 'presentation of results'. Therefore, Engels had to modify the bulk of the manuscripts extensively, to make them readable; in this way, he produced the first interpretation of these fragmentary investigations. Some features of Engels's approach have been described with examples in this essay. Although until now, as far as I know, no *intentional* distortion of the original text has ever been proved, Engels obviously had motives which probably influenced his editorial decisions: first, Engels wanted to protect Marx's reputation as a scientist;⁷⁵ second, he aspired to strengthen the socialist parties' position in their political struggle against capitalism. Engels emphasised as much in his letter to August Bebel, 4 April 1885, when he said that this volume should 'provide the unshakeable foundations for our theory', and 'fundamental economic questions should come to the fore'.⁷⁶ Third, Engels had experience of a capitalist economy himself, and he had his own ideas about its mechanisms⁷⁷ which may also have influenced his editorial work, although perhaps only as an 'unintended consequence'. And finally, he saw the publication of the manuscripts as a contribution to establishing a 'befitting monument to the memory' of Marx, as he remarked in a letter to Laura Lafargue, dated 24 June 1883.⁷⁸

Reviewing Engels's editorial work on *Capital*, we can conclude that the differences between the manuscripts and the published versions do indicate that Marx originally attached more importance to balancing reasons and arguments, without always deciding which ones he preferred. Engels, by contrast, appears to have been more focused on presenting the results of the process of reasoning, such as a clearer prospect of a possible breakdown of capitalist pro-

74 *MEGA*² 11/13, p. 8; MECW, vol. 36, p. 9.

75 Engels to Laura Lafargue, 8 March 1885; MECW, vol. 47, p. 264 f.

76 MECW, vol. 47, pp. 269 ff.

77 See Vollgraf 2006.

78 MECW, vol. 47, p. 39 ff.

duction, or a more universal development of capitalist production – passing over Marx's considerations about possible qualifications or restrictions of the argument.

The task of the *MEGA*² was to make Marx's original texts available as well as Engels's modifications of these texts. For the first time, readers of *MEGA*² can study Marx's texts, and the way he dealt with his subjects and problems in their entirety; study and reflect on Engels's changes; and observe the context that both men worked within. This, in my view, provides a solid basis to learn all about Marx's analysis of his world, and also to identify questions, answers, or methods which might still prove useful today in analysing our own economic situation. And hopefully, the disclosure of the disparity between the original manuscripts and the published versions has now created space for us to examine and interpret Marx's legacy anew.

About the Beginning and End of Capitalism. Observations on the Consequences Possibly Derived from the Discoveries of *MEGA*²

Jorge Grespan

Regina Roth's essay is very important for all those researching Marx's economic work, because it synthesises the main results achieved by the *MEGA*² in publishing the original manuscripts. I agree completely with the general idea she states about the relevance of the *MEGA*² in revealing what Marx did and did not write in the text published by Engels as volumes II and III of *Capital*. Therefore, my observations and questions in what follows are not really *objections* to Roth's essay, but refer rather to some possible implications derived from the discoveries which Roth records. My argument is focused on the origin and the end of capitalist production, and more specifically on the road to capitalism in England as compared to other countries, as well as on the nature of categories such as a '*tendency*' or '*law*' of the falling rate of profit.

Argument

First, I will comment on the importance of the disagreement between Marx and Engels about the French edition of 1872 of *Capital* Volume I. As Roth mentioned, Marx wanted the French translation to be used as a basis for the translations to all other languages, and was therefore very much dedicated to its careful revision, even rewriting some parts, or writing new ones. This is very important today, when new editions of *Capital* propose to change traditional translations for key concepts, like 'surplus-value'.

It is well known that, until the 1970s, there was little dispute in France about using Joseph Roy's translation, which was revised and authorised by Marx himself. However, the new translation coordinated by Jean-Pierre Lefebvre, published by Editions Sociales in 1983, recommended replacing 'plus-value' with *survaleur* as the best equivalent for the German *Mehrwert*, in order to keep the root *valeur* the same as in the German *Wert*.¹ This in turn inspired Pedro

1 For the justification of this change, see Balibar and Lefebvre 1978.

Scaron, the new translator of *Capital* into Spanish, to replace the old *plusvalía* with *plusvalor* (in the Mexican edition published by Siglo XXI).² And the new third translation of *Capital* in Brazil also prefers *mais-valor* to *mais-valia*.³ Yet Marx left the expression *plus-value* in the first French edition. It was correctly translated as *valia*, not as *valor* in Spanish and Portuguese, indicating that the issue was not as decisive as the new translators claim.

Let me turn though to a far weightier issue, which concerns the origin and end of capitalism. I will start with the origin. A comparison made by Regina Roth between the French edition of 1872 and the German editions of *Capital's* MEGA² published by Engels in 1883 and 1890 respectively shows an interesting discrepancy. Already in the preface, and again in the chapter on 'primitive accumulation', the French text suggests that not every country must necessarily follow the English path to capitalism. Indeed, in Roth's words, 'Marx explicitly restricted his conclusions to "the countries of Western Europe" ... These alterations suggest that Marx left room for alternatives to capitalist production, especially in non-Western-European countries'. Unfortunately, she says, 'Engels disregarded these modifications and used the same texts as in the first German edition', therefore suggesting a rigid theory about the transition to capitalism (which would have an extraordinary influence in the nineteenth century).

I agree about Engels's mistake. Yet, acknowledging that there are many roads to capitalism, or many variations in existing capitalist economies, is something completely different from the conclusion that Marx would have developed 'reservations about his earlier view of capitalist production as the only way for development each and every nation or economy could share, then or in future'. Even if we accept that Marx changed his mind about the road to capitalism, it does not follow necessarily that for him capitalism itself was no longer 'the only way for development' (at least for the kind of development leading to socialism). That idea would mean that a radical modification occurred in Marx's view of history and socialism, a modification that cannot be proved just by what is suggested in two separate passages in a whole book.

As regards the end of capitalism, another comment I want to make is about the theory of crisis and the falling rate of profit in *Capital* Volume III. Regina Roth informs us about Engels's predilection for a theory in which crisis is defined as a gradual decrease in the basis of capital accumulation, and that he even added the sentence 'but in reality ... the rate of profit will fall in the

² See Scaron 1978.

³ See De Deus 2010.

long run' to Marx's text. This is indeed a very weighty issue. Yet there are also statements by Marx in the same chapter that go in the same direction. For example, he affirms that a rise of the rate of surplus-value 'does not suppress the general law. But it makes the law operate rather as a tendency'.⁴ For the sake of a coherent story, Engels smuggled in sentences about the 'historical mission' of capitalism, about it 'becoming senile' and being destined to an unavoidable end.

All this certainly had harmful effects on the reception of this fundamental aspect of Marx's theory. In the era of the Second International, a fatalistic perspective of crisis was already strong, and the models of capital reproduction taken from the last section of *Capital* Volume II provoked the well-known and erroneous debate between those who supported the thesis that capitalism would always be able to avoid its crisis, and those who supported the thesis of the inevitability of a breakdown by purely economic causes. And this split between the extremes of the 'simple possibility' and the 'absolute necessity' of crisis put revolutionary action on hold, either because capitalism could be viable, or because it sufficed to wait for its economic collapse without taking any action to bring about a revolutionary situation.⁵

As an alternative, Regina Roth quotes Geert Reuten, who affirms that 'Engels's version allows two different, if not contradictory interpretations of Marx's ideas: first, a "theory of cyclical development" and second, a "theory explaining a trend"'. Indeed, a close reading cannot avoid noticing in Marx's manuscript the presence of a concept of economic cycle, although it is weakened by Engels's preference for the tendency theory, affirmed as a 'law'. It is in this sense that Roth's essay correctly refers to the 'ambiguity' of the category of 'law' in the reconstruction proposed by Engels as the correct interpretation of Marx.

However, even in the case of an economic cycle, we would also have to face the question of whether the alternative phases of the cycle follow each other in a fatal, absolutely necessary way, or if there would be a mere possibility for each phase to succeed the other. Whether crisis is understood as the turning point of the ascending to the descending phase, or whether it is understood as the descending phase itself, the essential question remains: is crisis inevitable in capitalism?

4 My translation. In the original: 'hebt nicht das allgemeine Gesetz auf. Aber er macht, dass es mehr als *Tendenz* wirkt' (*MEGA*² II/4.2, p. 304).

5 It brings to mind Walter Benjamin's eleventh thesis in his *Concept of History*: 'Nothing was so corruptive to the German working class as the opinion that it swam with the tide' [in the original: 'Es gibt nichts, was die deutsche Arbeiterschaft in dem Grade korrumpiert hat wie die Meinung, sie schwimme mit dem Strom'] (Benjamin 1996, p. 670).

In my opinion, the answer to this problem must stay clear from both extremes – either a simple possibility, or an absolute necessity – of economic cycle as well as of a general trend. I would like to defend this interpretation in a brief digression.

Let us consider, firstly, the case of the falling rate of profit, presented by Marx together with the counteracting tendencies that diminish or even cancel the fall, at least temporarily. Here the opposite sides of capital's contradictory constitution manifest themselves. The tendency of the rate of profit to fall is a form of crisis, of the loss of value, contradicting the very definition of capital as self-valorisation. Would it be a necessity, in the sense that its counteracting tendencies will in the end diminish, and be reduced to a mere possibility that would perhaps never happen? Or would these counteracting tendencies alternatively be decisive, reducing the fall of the rate of profit to a mere possibility, to a danger always surpassed by capital, which is able to accumulate indefinitely? According to my analysis, the problem is precisely the definition of 'necessity', which is often taken as absolute, in the sense that it comprehends and reduces its alternative to a simple possibility – thereby affirming itself as something inevitable. If this was the case, crisis would either be this 'simple possibility' within the inexorable progress of capital accumulation, or appear as 'fatal collapse', leading by itself alone to the end of capitalism, without the need of political and social struggle.

But, what if tendency and counter-tendency are equally necessary, neither of them being a mere possibility? As a matter of fact, Marx's texts fully support such an interpretation. None of the opposed tendencies succeeds in completely subordinating the others and reducing them to a mere possibility, simply because in the definition of each, each one of the elements defining the other is already present, forming a whole of complementary opposites. Each of them is necessary, but each one is not *absolutely* necessary, because they are not contrary to a mere possibility, which could perhaps be absorbed by a larger necessity. Each one of them is faced with its necessary opposite, which is not reducible in its necessity and not excluded in its opposition. Internally divided by its essential contradiction, capital never actualises completely its tendency to accumulation. But neither is there actualised definitely the tendency to crises as an unavoidable breakdown, or as a gradual stagnation, or as the lower stage of a cycle. The actualisation of each tendency depends on conditions not entirely comprised in them, also because, if any tendency comprises them, it would be self-referential, without any need of the opposite to determine it.

In this way, what happens, happens necessarily, but not in a predetermined order. The way in which the variables articulate, the order resulting from this

articulation, and consequently the form of their disposition in time (of their temporality), are by no means a product of an 'absolute' necessity. This can be considered as 'indeterminacy' in the form of movement of capital. Within the economic instance, the opposed tendencies to accumulation and to crisis are articulated as two relative necessities, that is to say, related to and dependent on each other. And the movements that follow are configured by the enormous range of resulting alternatives, and never as something completely predictable.

By evoking the classical modal question in philosophy – always associated with the categories of possibility, necessity, and actuality – we reach an interesting result: as a tendency, or as the descendant phase of a cycle, crisis is necessary, not just possible; crisis is inherent to the very constitution of capitalism. But it is necessary without excluding the opposite necessity, namely, that capital must also accumulate, in order to be 'self-valorising value'. The same is true for the ambiguity in the Marxian notion of 'law', because, as a law, the tendency imposes itself only within conditions not contained within it. Therefore, 'relative necessity' can also be called 'conditional necessity', for its realisation depends on *external* conditions. Both fatalism and optimism towards capital's destiny – and these extremes have been endemic in Marxism since the Second International – would therefore be unilateral simplifying positions.

These ideas can also be helpful in dealing with another problem that is raised in the text, namely when it refers to Michael Heinrich's interpretation – that is, the economic determinants of a crisis. The third section or chapter of Volume III is again at stake. Apparently, Marx presents here the various theories he had developed in the course of many years: the theories that explain crisis by the disproportion in the terms of trade (buying and selling) between the different branches of social production,⁶ or the theories according to which crises are caused by the fall of the rate of profit due to a rise in the organic composition of capital, or to increasing wages with diminishing profits.⁷

According to Roth, Michael Heinrich 'identifies various considerations on crisis' that Marx discussed at the end of the chapter but without deciding which one he preferred. Engels intensely revised these considerations 'in an attempt to offer the reader most of Marx's thoughts and arguments, but in a readable way'. I think there is here an exaggeration of the role that Engels played in the edition. The text suggests that he disassembled this third chapter of Marx's manuscripts, reducing it to small pieces, and then assembled it again in such a manner that a coherent theory could be stated, the purpose of which

6 MEGA² 11/4.2, p. 313.

7 MEGA² 11/4.2, pp. 326–8.

was to explain crisis. If we compare the manuscripts with Engels's edition, however, it is easy to see that he did indeed disassemble the text, but in big blocks. Chapter 15 ('Development of the inner contradictions of the law') in his edition corresponds uninterruptedly to the order of pages 321 to 334 of the manuscripts in the *MEGA*² edition, where Marx presents a rather coherent theory of crisis as over-accumulation. This theory can be seen as a synthesis of the preceding partial ideas, a procedure that would justify their recapitulation, before the proposal of an enlargement. Hence, instead of an 'indecision' by Marx concerning the many possible explanations of crisis, we can see here the development of a new and more comprehensive explanation, not mentioned in Heinrich's interpretation. Of course, Heinrich is right when he continues that 'Engels's edition at least implies the idea that Marx intended to present a theory of crisis within the frame of the falling rate of profit: a theory that was, however, unfinished'. But insofar as the concept of over-accumulation is related to the rate of profit, it must refer to the fall of the rate of profit anyway. On this view, crisis is really settled much more as a cyclical than as a trend theory, especially taking into account Engels's notion of tendency as 'law'. And the theory remained really 'unfinished'; it is generic, less detailed. But it is not true that it is not yet sound and solid.

As a matter of fact, not every determinant of crisis mentioned in this part of Marx's manuscripts, including the case of under-consumption, can be considered compatible with the others inscribed in over-accumulation. Regina Roth observes that Engels removed the brackets separating the text in which Marx also indicates the 'poverty of the masses' as 'the ultimate reason for all real crisis', thus mixing levels and types of explanation. This is certainly a piece of advice of great importance. As she notes, the 'passage has been read as evidence for Marx advocating an under-consumption theory for crises', a theory that causes many misunderstandings, by reducing the complexity of Marx's explanation. With this exception, however, other determinants can be ordered perfectly well as stages in the development of a concept of crisis culminating in over-accumulation.

Heinrich actually admits, in his *Die Wissenschaft vom Wert*, that 'Crisis must not be considered anymore only as the culminating point in connection with the world market, as the earlier plans in *Grundrisse* or the *Einleitung* anticipated; all the moments of crisis must be developed in every level of the exposition'.⁸ There is a correct idea here that should be emphasised: the 'levels of

8 In the original: 'Die Krise ist also jetzt nicht mehr, wie es noch in den frühen Planentwürfe in den Grundrissen und in der Einleitung vorsahen, nur als letzter Punkt in Zusammenhang

exposition'. In other words, the meaning of Marx's concept of crisis is only gradually defined, in parallel to the concept of capital, to which it stands in opposition. As 'capital' receives an enriched meaning, its negative, 'crisis', also receives its own. Disproportional trade between branches of production, for instance, corresponds to former moments of the exposition, respectively to Volume II of *Capital*. Volume III presents the concept of the falling rate of profit only to develop the more complex concept of over-accumulation. And to each of these moments corresponds a different modality – from the simple possibility up to the conditional necessity of crisis.

In this context, the criticism that Engels would have given to *Capital* the stamp of 'a mere encyclopaedic collection' in contrast to 'the dialectically structured presentation which was Marx's aim'⁹ seems to me very appropriate. But it proves precisely my point, i.e. that the different determinants of crisis are not juxtaposed, as if Marx had not yet 'decided' to choose any of them. Marx was in the process of defining a complex and new concept of crisis.

Conclusion

My commentary focused on issues that can be considered to belong to the field of the Marxian theory of history. The first issue concerned the beginning of capitalism. The fact that Engels disregarded two passages of the French edition of *Capital* Volume I, about the possibility that other countries would not follow the English path to capitalism, does not entitle us to conclude that Marx was pondering 'alternatives to capitalist production'. These are *two different moments*. I agree completely with the idea that Marx never envisaged a rigid succession of historical stages from the old Asiatic to the feudal mode of production. But I think that he always believed capitalism could not be avoided altogether in the road to a future socialism.

A second issue concerns the end of capitalism. I fully accept that Engels was wrong both when he suggested a gradual decreasing of the basis of accumulation caused by the tendency of the rate of profit to fall, and when he conceives this movement as a 'law'. But again, this mistake does not warrant the conclusion that the correct alternative for such a rigid concept of tendency is the

mit dem Weltmarkt zu betrachten, sondern die Krisenmomente sind auf allen Darstellungsebenen zu entwickeln' (Heinrich 2011, p. 356). What I want to emphasise here are the 'Darstellungsebenen'.

9 Heinrich 1996–7, p. 462, as cited by Regina Roth.

concept of cycle. These two are not 'different, if not contradictory' concepts, if the cycle is also understood as something inevitable. The problem with both concepts is rather the view of necessity as a fatal, absolute destiny. A theory of the economic cycle would then be as rigid and wrong as a theory of a falling rate of profit, insofar as it is not proposed in terms of a relative, conditional necessity (where the stages of increase and decrease in the rate of profit do not succeed each other 'automatically').

Finally, with the end of capitalism still in view, my commentary considers the question of the structural determinants of the economic crisis. Instead of an 'indecision' by Marx about which explanation of crisis he would choose in his theoretical development, I propose that the different determinants correspond to different 'levels of exposition' of *Capital*, and that Marx was recapitulating them in the third part of the manuscripts for Volume III, in order to somehow inscribe them in a more complex and comprehensive concept of crisis, determined by the over-accumulation of capital.

There is always the risk of portraying Engels as the 'bad guy' in the history of *Capital's* publication. Regina Roth rightly affirms that it is not appropriate to claim that Engels was motivated by 'bad intentions'. At the end of the essay, some reasons are presented that might help us to understand Engels's editorial attitude: 'Engels wanted to protect Marx's reputation as a scientist ... he aspired to strengthen the socialist parties' position in their political struggle against capitalism ... he saw the publication of the manuscripts as a contribution to establishing a "fitting monument to the memory" of Marx'.

The second reason seems to me to be more important than the other two, because it concerns a political motivation. Engels wished to contribute to the establishment of a solid theoretical basis for a Marxist party in the 1890s – also in opposition to reformist rival theories. If we understand in this sense the historical and political circumstances of his edition of Marx's *Capital*, it will be easier to understand how the philological work of *MEGA*² gives us today the means to establish a theory and praxis for a new socialism, coherent in the face of the actual conditions of capitalism, which are even more interesting than those in Engels's time.

Marx's Further Work on *Capital* after Publishing Volume I: On the Completion of Part II of the *MEGA*²

Carl-Erich Vollgraf

When in 1908 the young Austromarxist Otto Bauer published an essay on Marx's *Capital* in the journal *Die Neue Zeit*, he titled it 'The History of a Book'. His idea was that each generation has *its own Marx* – and not just because each historical epoch poses different questions. After all, new texts by Marx continued to become available all the time. His own generation, he noted, had access to all three volumes of *Capital*. So, with Marx's overall plan in view, it was obvious that one could now read *Capital* in a different way than the previous generation, which had to make do with Volume I only.¹ Bauer could hardly predict what the situations of future generations would be, yet he anticipated them pretty well. Again and again there were new upheavals in society, but also new texts by Marx, new interpretations in different settings, and revisions – right up to the present day.

In the years after 1989, with the collapse of state socialism, the literary market was for a while filled with obituaries in the style of 'what remains of Marx now?', but then it quickly turned out that he had never written any book about socialism. Subsequently Marx has joined the real classics. Everyone can now approach his work freely, and interpret its content in new and different ways. Even those who are well-read return to Marx, to confront the new dimensions of capitalist accumulation and the unbridled pursuit of profits. At least in passing, he is again acknowledged.² The *MEGA*² is an aid in this process: extensive material relating to Books 2 and 3 of *Capital* is published for the first time, most prominently the complete drafts of 1864/65 and 1868/70. The complete manuscripts for both books as edited by Engels have also been published. Thus, for the first time, the relationship between author and editor can be discussed on the basis of documentary evidence. In terms of Bauer's vis-

1 Bauer 1908, p. 33 and pp. 27–8.

2 For example, Herr and Rogall argue that Ricardo and Marx could not yet recognise problems such as global warming and reduction of biodiversity (Herr and Rogall 2013, p. 82).

ion, we are the last generation to whom new drafts of Marx's *Capital* become accessible; part II of the *MEGA*², completed in 2012, represents the end of an era.

The extensive primary publications in the *MEGA*² have received a remarkable response. Some authors declare that they are reprinting their own writings unchanged, since, in other respects, the current state of the scientific debates – especially given the *Capital* part of the *MEGA*² – would require them to write a completely new text.³ Others argue that the previously unknown manuscripts shed new light on Marx's work, and that, for example, a new introductory course on Marx's theory of the rate of profit would be appropriate.⁴ Authors who had already declared the 1870s as the decline phase of *Capital* are forced to reconsider their interpretation with the publication of volumes II/11 and II/4.3 in the *MEGA*² (2008 and 2012). Disagreements keep a discourse alive: there are also some authors who do not believe that anything they said for decades about the text of *MEW*, Volumes 23–5 (*MECW*, Volumes 35–7) is now called into question. Finally, another group sees the manuscripts as one more confirmation that, although Marx wrote innumerable drafts, he never finished anything – a 'patch-job' overall. They believe that, contrary to its original intentions, the *MEGA*² demystifies and delionises Marx, the consolation being that it shares this shedding of illusions about an author with all other historical-critical editions.⁵

In what follows, I present some theses on the texts first published in Part II of the *MEGA*², especially from the era between 1867 and 1881. I am concerned here mainly with essentials, and less with specific theoretical advances.

1 To the Very End Marx Upholds His Vision and Conviction that Capitalism Must be Abolished. This is the Common Thread, the Fundamental Coherence and the Constant in His Multifaceted Work across Four Decades.

Even so, Marx's views on the vitality of capitalism, its economic potencies, its social possibilities and its developmental ranges do change over time. His

3 Arndt 2012, p. 257.

4 Heinz D. Kurz, 'Die Verwohlfeilerung der toten Arbeit. Das "Kapital" ist historisch-kritisch ediert: Zeit für einen Grundkurs zum Fall der Profitrate', *Frankfurter Allgemeine Zeitung*, 3 July 2013.

5 Helmut König, 'Marx-Engels-Gesamtausgabe. Lauter Prolegomena', *Neue Zürcher Zeitung*, 20 July 2013.

view of capitalism broadens, to the extent that he develops his theory of the reproduction of capital, and progresses from what is only a theory of exploitation to a theory of the movement of capitalist production as a whole. When Marx sets out reproduction schemas at the end of *Manuscript VIII* for Book 2 (1877/81), they are worth the effort: these schemas are not intended to recapitulate what came before, but serve as an analytical tool for future elaboration. They are meant to show that equilibrium conditions reached in motion are constantly also destroyed again.

It would have been the least surprising to Marx himself, as a materialist, that his views changed. After all, in the 40 years that he was grappling with the subject, capitalism changed considerably. Capitalism is, as Marx soberly acknowledges and accepts in the preface of Volume I in 1867, 'no solidified crystal' [fester Krystall], but an 'organism understood as capable of change, and constantly in the process of transformation'.⁶ In his last years, Marx no longer talks about an impending collapse of capitalism; the contrary is more true. At the end of 1878, queried by a correspondent of the *Chicago Tribune* about the chances of his theories being put into practice, Marx is reported to have answered: 'if not in this century, at least in the next'.⁷ Astounded by the pace at which socio-economic upheavals were occurring in the United States – processes that in England had taken centuries – Marx felt that his theory of accumulation was confirmed. But he also sensed the new political dimension: 'The people will try in vain to get rid of the monopolising power and the (as far as the *immediate happiness* of the masses is concerned) baneful influence of the great *compagnies* swaying industry, commerce, property in land, railroads, finance – at an always accelerated rate since the outbreak of the Civil War'.⁸ Although in the drafts of his well-known letter to Vera Zasulič (1881) Marx talks about the 'suicidal tendencies' of bourgeois society, he deletes an important statement in the last version: that capitalism is withering in the West.⁹ Yet, in the same breath, he writes to Ferdinand Domela Nieuwenhuis that bourgeois society is inevitably and steadily disintegrating before our eyes.¹⁰ A contradic-

6 *MECW*, vol. 35, p. 11; *MEGA*² 11/5, 1983, p. 14.

7 Account of Karl Marx's interview with a correspondent of the *Chicago Tribune*, *MECW*, vol. 24, p. 569; *MEW*, vol. 34, p. 509.

8 Marx to Nikolai Danielson, 15 November 1878; *MECW*, vol. 45, p. 344; *MEW*, vol. 34, p. 359.

9 This correction is first revealed to the reader in *MEGA*² 1/25, in the lists of variants for the drafts of the letter to Zasulič (see Karl Marx: 'Deuxième projet de la lettre à Vera Ivanovna Zassoulitch and Troisième projet de la lettre ...', *MEGA*² 1/25, 1985, p. 238 and p. 885, variant 233.15 (1)).

10 See Marx to Ferdinand D. Nieuwenhuis, 22 February 1881 (*MECW*, vol. 46, p. 67; *MEW*, vol. 35, p. 161).

tion? I think, rather, that there are two dashes of colour in Marx's role-play: toward workers' functionaries like Domela Nieuwenhuis he acts politically resolute. To accepted scientific colleagues like Nikolai M. Kovalevskij or Nikolai F. Daniel'son he appears pensive, open-minded, and sometimes at a loss. 'A nice pickle it is altogether', he sighs in a letter to the latter. He refers to the present English crisis: flat, without monetary panic, bullion drains compensated from outside. In addition, there is an agricultural crisis in which the farmers can no longer cover their costs,¹¹ while at the same time American wheat is flooding Europe.

With Marx's insight into longer-term development potentials of capitalism, hitherto unalterable political positions are recalibrated – something which is hardly ever discussed by Marxist interpreters: the relationship of trade union and political struggles, the relationship of reform and revolution. Thus Marx writes in a letter to Nieuwenhuis in February 1881 that the right conjuncture for a new International has not yet arrived, that such activity is harmful, and that labour and socialist congresses should focus on national tasks. He declares sagaciously, with an air of newfound mathematical self-confidence, that 'We cannot solve an equation that does not comprise within its terms the elements of its solution'.¹² Of course, the events of the Paris Commune and the results of the Franco-Prussian War had not escaped him, and the Anti-Socialist Law has him worried.

The winner in this modified perspective on capitalism is Marx's materialist view of history; it gains economic terrain. Twenty years later, Bernstein would rightly point out in the *Sozialistische Monatshefte* that it is not enough for the materialist conception of history to elucidate transitions between great historical epochs, but that it must also explain the time spans in between, in which generations live and act.¹³

In the 1870s, Marx ineluctably becomes more tolerant to those economists concerned with the development of the bourgeois economy and its efficiency, who did not, like himself, have the goal of its abolition. Examples of revised evaluations are his positive remarks about Friedrich List and Johann Heinrich von Thünen. Overall, Marx's field of reading becomes more 'German' in the 1870s. Exponents of the younger Historical School appear on the scene, in particular those concerned with productivity and the agricultural perspective,

11 *MECW*, vol. 46, pp. 31–2; *MEW*, vol. 34, p. 464.

12 Marx to Ferdinand D. Nieuwenhuis, 22 February 1881; *MECW*, vol. 46, p. 66; *MEW*, vol. 35, pp. 160–1.

13 See Bernstein 1903, p. 258.

the development of the transport industry or with scandals in the financial markets. Marx reads books by socialist competitors (Eugen Dühring) and by social reformers (Friedrich A. Schöffle).

2 From the 1860s, Marx Views ‘Capital’ as a Job to be Done¹⁴ and as a Vocation. To the Very End, he Wants to Publish Volume II (= Books 2 and 3) in order to Complete the Theoretical Parts of His Work.

On 30 April 1867, Marx writes to the socialist Sigfrid Meyer (who lives in the United States, and is a member of the International) that he would have thought himself an ‘unpractical’ man if he had not completed his book ‘at least in manuscript’. He mocks the ‘practical’ men and their wisdom – a response to Hegel’s remarks on the Seven Sages, who are content with philosophy as their sole aim.¹⁵

However, for us as his readers, it makes a crucial difference – the difference between believing and knowing – whether we only have Marx’s intentions as expressed in his letters (often in a full-bodied way) or whether we have actual texts in front of us that document his efforts to realise his endeavour convincingly in three books: his manuscripts, drafts, sketches and fragments of ideas for *Capital* Books 2 and 3, written between 1864 and 1881: circa 2,350 printed pages, published for the first time in the *MEGA*².

The documentary value of the manuscripts for Books 2 and 3, published for the first time in recent years, can scarcely be overestimated in this regard. The list of scholars who doubt the sincerity of Marx’s intention to present the larger work on ‘economic principles’, announced in 1858/59, is long. Marx himself must take the blame for that. Scepticism emerges already in the 1860s, when he fails to continue Part 1 of *A Contribution to the Critique of Political Economy* (1859). At first, friends and acquaintances worry about the announced presentation of ‘capital in general’, first and foremost Engels¹⁶ and Louis Kugelmann,¹⁷ and later also political companions like the Neo-Kantian Friedrich

14 See the letter of Marx to Ludwig Kugelmann, 23 August 1866 (*MECW*, vol. 42, p. 312; *MEW*, vol. 31, p. 520).

15 *MECW*, vol. 42, p. 366; *MEW*, vol. 31, p. 542.

16 From as early as 1860, Engels has been arguing that it would be better that the second instalment be published with shortcomings than not at all (Engels to Marx, 31 January 1860; *MECW*, vol. 41, p. 14; *MEGA*² III/10, 2000, p. 181).

17 See Louis Kugelmann to Marx, 18 March 1863 (*MEGA*² III/12, 2013, pp. 347–8). Here Kugelmann rightly takes issue with Marx’s arrogant preliminary remark in *A Contribution to the*

A. Lange, a registered member of the International, or Wilhelm Liebknecht.¹⁸ A fall-out occurs with the publisher Franz Duncker. After Volume I of *Capital* has finally been published in 1867, Otto Meißner repeatedly demands the prompt and complete fulfilment of the contract for the three books. Reviewers insist on the sequels to the first volume (Dühring). In the 1870s, the social democratic press encourages Marx to speak out as he promised on issues like share capital, ground rent and the 'New World'. As an alternative, influential Social Democrats (like August Bebel) consider compiling the best of the socialist literature themselves. Carl A. Schramm, a socialist publicist, tries to challenge Marx in 1875: can he tell his readers that Rodbertus's views on differential rent are the best at the time?¹⁹ It is also Schramm who calls for an explanation of the relationship between value, prices of production and market prices. He provokes Marx into making a statement that raises eyebrows: that the second part of *Capital* cannot be published in Germany because of the Anti-Socialist Law. Marx adds that he does not mind this, since there are anyway new economic developments that he needs to work on.²⁰ It sounds more like a pretext. And indeed, soon enough Marx corrects himself and states that, despite the political circumstances, he is fully focused on completing Volume II. Only after Marx's death, when Engels had compiled a version of Volume II (published in 1885), can he answer the Italian economist Achille Loria's charge that Marx never considered continuing *Capital*. Many of his contemporaries did not live to read this edition, or his published version of Volume III nine years later. Rudolf Meyer, known for his editions of the works of Rodbertus, already asked Engels in 1884 to complete *Capital*, and kept urging him in the 1890s: 'How far did you get with Marx III? I'd like very much to read it before I am gone'.²¹ Meyer got lucky, but whether Georg Stiebeling,²² who enters into debate with Karl Kautsky and

Critique of Political Economy that parts of the work could be executed by others, once the foundation had been laid. Kugelmann argues that the audience expects the complete work.

18 'I hope you realise how necessary it is ... that your economics be completed. By when, approximately?' (Wilhelm Liebknecht to Marx, 18 March 1865; *MEGA*² III/13, 2002, p. 336).

19 See Carl A. Schramm to Marx, 31 March 1875 (*MEW*, vol. 34, p. 573, note 245).

20 See Marx to Ferdinand D. Nieuwenhuis, 27 June 1880 (*MECW*, vol. 46, p. 16; *MEW*, vol. 34, p. 447).

21 Rudolf Meyer to Engels, 3 March 1892 (IISH, Marx-Engels Collection, L 4989). Meyer is particularly interested to know how Marx regards the lengthy turnover periods in agriculture.

22 Georg Christian Stiebeling (1830–95), a German physician, emigrated to the United States in 1851. He was a member of the International, and of the Socialist Labour Party.

Engels about a putative solution of the transformation problem between 1890 and 1893, ever laid eyes on Volume III – he died in 1895, shortly before Engels – we do not know.

Even Engels benefits posthumously from the material now published for the first time: it is only through this material that his description in his preface to *Capital* Volume II of the manuscripts Marx left behind becomes understandable (though at the same time redundant), and that his difficulties in editing Books 2 and 3 become manifest and scrutable to others.

Marx's determination to advance the project of *Capital* is clearly demonstrated in the manuscripts from 1867 to 1881. This by no means implies that he would in fact have completed the work, even if he had lived longer and had not suffered severe personal setbacks, including the death of his wife and daughter. I am sceptical in this regard, and in what follows I hope to explain why.

3 Marx Ended up not Writing Book 4, a 'History of Political Economy from the Middle of the 17th Century'.²³

Marx could only have written a *history of political economy* after completing Books 2 and 3 of *Capital*, when he had worked out his own theory and developed his own system of value categories. Its presentation would have posed numerous conceptual and structural problems for him, if he had indeed wanted to put together previous material and write the history of the science as a prehistory leading up to himself, like Eugen Dühring. Among the problems I include the following: (a) the analytically most advanced *Theories of Surplus Value* could not have formed the core of this story. The development of the conceptions about value since William Petty and John Locke would have taken logical precedence. (b) Marx would have had to elaborate on the history of theoretical development regarding all of the subjects that he dealt with in *Capital*. His explanation to Sigmund Schott on 3 November 1877 that he had begun his work on *Capital* with the third, historical part,²⁴ is far too optimistic. The enormous size of the notebooks he wrote misleads Marx about the state of his own work. Most of the passages in the *Theories of Surplus Value* are analytical, and not yet fully worked out as his own interpretation – often they are not well-considered, pedantic and quibbling. (c) Marx would also have had to touch on the subjects that he did not explicitly deal with in *Capital*, like

²³ Marx to Sigfrid Meyer, 30 April 1867; *MECW*, vol. 42, p. 367; *MEW*, vol. 31, p. 543.

²⁴ See *MECW*, vol. 45, p. 287; *MEW*, vol. 34, p. 307.

the world market, or the role of the state in the economic structure. (d) Marx would have had to attend to the 'proletarian opposition' (Hodgskin, Bray and others) and could not have depicted 'vulgar economics' merely as the phase of decline of classical economics. (e) Finally, how could Marx have organised the last chapter of the projected history of political economy? Would he have engaged with the crisis of the science of political economy, with the signs of its fragmentation into specialised economic disciplines? The indications of such trends were evidently of concern to him, and gave him a sense that his project could be the last of its kind.

4 Contrary to Marx's Own Statements, 'Capital' is Never Completed or Concluded – Neither in Content nor Formally.²⁵ To the Very End, It Remains a Work in Progress.

Marx announced in February 1866 that *Capital* had been 'ready' since December 1865.²⁶ Now that all the manuscripts are available, we know also why Marx was not in a rush to say anything like this – he had kept Engels waiting a long time – and what he means by 'ready': the conceptual architecture, not the elaboration of the content chapter by chapter, and certainly not the complete exposition.

In February 1866, Marx had in front of him a manuscript that could be considered a complete draft for Book 3 (*Manuscript I*, see *MEGA*² 11/4.2, 1992). By contrast, a complete draft of comparable quality for Book 2 (comparable also with regard to the many breaks, terminological inconsistencies or gaps) emerged only in 1868–70 (*Manuscript II*, see *MEGA*² 11/11, 2008). What Marx said years earlier about the manuscript of 1857/58 also applies to the earlier draft for Book 2 from 1865 (*Manuscript I*, see *MEGA*² 11/4.1, 1988): 'The damnable part of it is that my manuscript (which in print would amount to a hefty volume) is a real hotchpotch ... So I shall have to make an index ...'.²⁷ Marx's assessment of 'a hefty volume' does not apply to *Manuscript I* for Book 2. I mention it nevertheless, because Marx will also continue to assess the work remaining to be done on the basis of size, and indeed to entertain illusions about the actual

25 In the literature up to 1989, the standard interpretation was that Marx had completely worked out his economic theory by 1866. Everything that did not fit with this interpretation was explained away under the heading of methodological subtleties.

26 See Marx to Engels, 13 February 1866 (*MECW*, vol. 42, p. 227; *MEW*, vol. 31, p. 178).

27 Marx to Engels, 31 May 1858; *MECW*, vol. 40, p. 318; *MEGA*² 11/9, 2003, p. 157.

rational core of his arguments. *Manuscript I* is not very extensive – but in 1877 he will find it necessary to create an index for it, too.

Even in the case of Volume I of *Capital* – which many authors regard as a ‘final version’, a ‘final text’ – we have, with the second German printing and with the French edition, *editions of last hand* but not *editions of last intention*. Marx says he plans to rework the volume. His literary estate shows that he is serious about this; we find enough evidence of changes. Yet in 1881 he requests an unchanged third printing of 1,000 copies only – to supplement his own income. He does not want the completion of Books 2 and 3 to be impeded.²⁸ Engels later describes the postponed revision of Volume I as follows: reworking large parts, inserting new theoretical points, sharpening others, and updating the illustrations.²⁹

One of the questions I find most interesting myself is the extent to which Marx might have given his presentation a more American flavour, shelving the classical model of English capitalism as a merely historical configuration. That would certainly have been more than a *change of model*; it might have amounted to a *change of perspective*, in keeping with the considerations of my first thesis.

In 1878, Marx refers to the United States as ‘the most interesting field for the economist’,³⁰ without the study of which he cannot complete his investigations. From the outset, its economic development is based on machine industry and its agriculture on the capitalist sharecropping system that Marx assumes in Volume I – the ‘true large-scale agriculture’.³¹ For this reason alone, the United States in the meantime provides a better model of the capitalist mode of production³² than England. Marx comments that ‘California is of great moment to me because in no other place has revolution by capitalist centralisation been effected with such effrontery at such great speed’.³³ The new processes of fast-paced concentration and centralisation of capital, as well as the struggles between railroad king Gould (‘the giant octopus’) and

28 See Marx to Nikolai F. Danielson, 13 December 1881 (*MECW*, vol. 46, p. 161; *MEW*, vol. 35, p. 246). See Engels to Eduard Bernstein, 4 November 1882 (*MECW*, vol. 46, p. 359; *MEW*, vol. 35, p. 391).

29 See Friedrich Engels, ‘Zur dritten Auflage’ [von Karl Marx: *Das Kapital. Kritik der politischen Ökonomie*. Bd. 1. Hamburg 1883] (*MECW*, vol. 35, p. 27; *MEGA*² 11/8, 1989, p. 57).

30 Marx to Nikolai F. Danielson, 15 November 1878; *MECW*, vol. 45, p. 344; *MEW*, vol. 34, p. 359.

31 Engels to Karl Kautsky, 1 February 1881; *MECW*, vol. 46, p. 57; *MEW*, vol. 35, p. 150.

32 See Karl Marx, ‘*Das Kapital* (Ökonomisches Manuskript 1863–1865), Erstes Buch’ [Einzelne Fußnoten. Fußnote 77.] (*MECW*, vol. 34, p. 467; *MEGA*² 11/4.1, 1988, p. 132).

33 Marx to Friedrich A. Sorge, 5 November 1880; *MECW*, vol. 46, p. 46; *MEW*, vol. 34, p. 478.

the New York trading companies, show him how the financial world establishes itself alongside real production and then spreads over it like a spider web. The American trade and transport tariffs fought over by the railroad and trade companies are of a different magnitude than the transport charges which Marx cites for the arduous transport of tea bales by barge from China to Petrograd (in *Manuscript 11* for Book 2, when he analyses the problem of transport costs). The rapid development of the transport industry as beneficiary of the large distances between mass production and mass sales is an economic phenomenon which 'call[s] for fresh appraisal', as Marx writes in 1880.³⁴ In every respect he was keen to read 'useful' publications about farming, landownership, credit, currency and financial panics in the United States.³⁵

In the 1870s, Marx is increasingly interested in comparative studies in all areas of economic life, to shed light on the question of whether economic development actually does follow the same laws in all countries or nations, as he had previously assumed. The rapid increase in the scope and scientific significance of comparative statistics makes things easier for him, and becomes a source of inspiration. His notebooks from the 1870s are filled with statistics from all areas of European economies, and other regions of the world.³⁶ He puts statistical manuals in the front rows of his library.³⁷ At the end of the 1870s, he discusses with Daniel'son how Russia might leap over phases of development, similarly to the United States.

34 Marx to Ferdinand Domela Nieuwenhuis, 27 June 1880; *MECW*, vol. 46, p. 16; *MEW*, vol. 34, p. 447.

35 See Marx to Friedrich A. Sorge, 4 April 1876 (*MECW*, vol. 45, p. 115; *MEW*, vol. 34, p. 179).

36 Already in 1869, Marx filled 58 pages of a notebook with excerpts from Otto Hausner's two-volume work *Vergleichende Statistik von Europa* (Lemberg 1865, IISH, Marx-Engels Collection, B 114). The notes concern, among others, the relationship between industrial, extractive and agricultural production, the size of these economic sectors, industrial output per capital, the relationship between arable and pastoral farming, the volume of iron production and the number of steam engines used, and the number of factory workers, miners and craftspeople in the individual countries.

37 See the personal copies of Marx: Adolphe Quételet, Xavier Heuschling: *Statistique internationale. (Population)*, Brussels 1865, and Max Haushofer: *Lehr- und Handbuch der Statistik in ihrer neuesten wissenschaftlichen Entwicklung*, Vienna 1872 (*MEGA*² IV/32, 1999, Nr. 1088 and 542).

5 **Part II of the MEGA² has Filled in all the ‘Blanks’ about Marx’s Creative Process in His Economics, Making It Possible to Face that Creative Process.**

I am referring here to 1861–3 (when Marx works on *A Contribution to the Critique of Political Economy*, of which prior to the MEGA² only the *Theories of Surplus Value* were known), to 1864–6 (when Marx writes his drafts for Books 2 and 3 of *Capital*), to 1866–7 (when Marx prepares the printer’s copy for Volume 1), and finally to 1867–81 (when Marx drafts 16 long and short texts for Book 2 and 13 texts for Book 3 – three texts pertain to both books).

The publication of Marx’s research manuscripts reveals that his work on *Capital* was not a linearly ascending process of knowledge acquisition. This conclusion is contrary to the received interpretation that prevailed before the MEGA², and which still influenced even the first volumes of part II of the MEGA² (perhaps also because of the existence of unpublished and unknown material). Instead, Marx’s work is much more a chequered process of advances and stagnation in understanding, of forming new concepts and discarding plans (cf. the discarded notion of ‘capital in general’), of textual progress and versions which are trashed, of taking sides and retreating again (cf. Marx’s involvement in the debate on soil exhaustion). When Marx has answered a question, he keeps looking for inconsistencies, often not confident in his own judgement. After long pauses, often due to illness, he is again and again forced to work his way back to the earlier manuscripts, and create indexes for their contents. When he starts to work again on Book 2 in the spring of 1877, that is the first thing he does.³⁸

This constant transition from research to presentation and vice versa is described in MEGA² II/4.3 with respect to the relationship of *Manuscript II* (in MEGA² II/11, 2008) and *Manuscript IV* (in MEGA² II/4.3, 2012), both written for Book 2.

An important feature of the economic manuscripts first published in the MEGA² is that they decode and reference many allusions made in Marx’s correspondence which were previously overlooked, providing valuable and instructive supplementary information. In the scholarly apparatus for *Manuscript II*, many authors and books referred to in correspondence are identified as actual sources, and relevant passages from the source texts are cited. This approach allowed previously undated excerpts to be linked with *Manuscript II*. All in all,

38 See Karl Marx, ‘Capital. Book 2: The Process of Circulation of Capital. Passages of earlier expositions to be used, Manuscripts I to IV’, (MEGA² II/11, 2008, pp. 525–48).

the textual references in part II have significantly increased the value of Marx's correspondence as a source of information. The same can be said of letters to Marx by others. The references allow the meaning of many terse, often surly comments and reactions by Marx to be understood for the first time. To give just one example: On 6 March 1868, Marx rails against the Scottish economist Henry D. Macleod: 'a very stilted jackass who expresses every banal tautology 1. in algebraic form, and 2. constructs it geometrically'.³⁹ One used to think: Marx is vexed by the reprints of a 'vulgar economist' he dislikes; perhaps he is even jealous. Now, numerous passages can be found in his newly published texts which prove that Marx seriously considered formalising parts of his theory mathematically, just like Macleod – except that Marx was interested not in 'playing around with mathematical appearances'⁴⁰ or in replacing verbal arguments with algebraic expressions, but in logically rigorous derivations of surplus value and profit, and in the identification of law-governed interrelationships.

However, Marx's drafts also indicate that in numerous letters to Engels and others, he presents the stage of development of *Capital* as far more advanced than it actually was. Take, for example, his letter to Engels of 13 February 1866: Book 3 is 'not fit for publishing for anyone but myself, not even for you'.⁴¹ This assertion, addressed to his confidant (thought to be quite familiar with the state of affairs), remains awkward and mysterious for readers who are only aware of Volume III in the MEW version, published by Engels. Only when the MEGA² published Marx's *main manuscript* for Book 3 from 1864/65, did it become clear what he really meant.

6 The Holistic, Chronological Publication of the Manuscripts in Part II of the MEGA² has Restored Numerous Texts to Their Rightful Place in the Genesis of Marx's Economic Theory.

The following examples are illustrations:

a) The publication and study of the *Economic Manuscript 1861–3* has shown that *Theories of Surplus Value* as the middle part of this manuscript is not – as Engels assumed⁴² and as widely circulated since the summer of 1884 – a pre-planned

39 Marx to Engels, 6 March 1868; MECW, vol. 42, p. 543; MEW, vol. 32, p. 39.

40 Dühring commenting on Macleod's efforts (Dühring 1929, p. 79).

41 Marx to Engels, 13 February 1866; MECW, vol. 42, p. 227; MEW, vol. 31, p. 178.

42 See Engels to Eduard Bernstein, 22 August 1884 (MECW, vol. 47, p. 188; MEW, vol. 36, p. 204).

preparatory work for a later *History of Political Economy*, and therefore it does not constitute an intended first draft for Book 4 of *Capital*.

Instead, in *Theories of Surplus Value* Marx wanted, on the one hand, to shape up and sharpen his categorical system, in polemics with his bourgeois predecessors. Ladislaus von Bortkiewicz already convincingly demonstrated this in 1911, only a few years after the publication of *Theories of Surplus Value*, by comparing the concepts of ground rent devised by Rodbertus and Marx.⁴³ On the other hand, Marx naturally feels the urge to sound out the putative place of his own system in the historical development of the economic sciences, by engaging with his sources and adversaries in detail. Thus the central problem in *Theories of Surplus Value* is: 'what do I, Marx, have to offer that is new, and how is this new material to be presented consistently?'

Only at the end of the *Manuscript 1861–3* – in the meantime, Marx had twice already regarded the arguments as exhausted, hence the designation of two notebooks as 'Ultimum' and 'Ultimum 2' (later Notebooks 16 and 17 in a series of 23) – does he decide to contemplate a history of political economy since the mid-seventeenth century. To this end, he compiles extensive material on the early bourgeois classical period (Petty, North, Locke, Massie, etc.), following the 'line of Petty's ... in which *capital* starts its revolt against *landed property*'.⁴⁴ This does not alter the fact that an historical-critical edition can publish the *Manuscript 1861–3* only in its entirety. And indeed David Rjazanov – the bustling collector of the writings of Marx and Engels and later the director of the Marx-Engels Institute in Moscow – took this as given already in 1923: 'The 23 notebooks of Marx should be printed as they have been preserved, followed by Volume I of *Capital* with all variants and drafts, and Volume II, on the one hand as Marx left it, and on the other hand in Engels's edition, and then Volume III in the same form. Volume IV would disappear, much to my regret'.⁴⁵ We can assume that Rjazanov's last sentence was intended as a sideswipe at Kautsky's edition of *Theories of Surplus Value*. I will return to his statement below.

b) The publication and analysis of the manuscripts from the 1860s led to the conclusion that *Manuscript I* for Book 1 from 1863/64 was not lost, as we still believed up to the penultimate volume of part II (*MEGA*² II/11, 2008). Instead,

43 See von Bortkiewicz 1911, pp. 1–40 and pp. 391–434.

44 Karl Marx, 'A Contribution to the Critique of Political Economy (Manuscript 1861–1863)' (*MEGA*² II/3,6, 1982, p. 2318).

45 Rjazanov 1925, p. 394.

Marx used this manuscript in 1866/67 in preparing the printer's copy; he 'cut it up' for the printer's copy. Detailed arguments for this view can be found in the introduction to *MEGA*² 11/4.3, 2012.⁴⁶

c) In 1894, Engels explains in the 48th chapter of Volume III, *The Trinity Formula*: '//here the manuscript breaks off//'. And a few pages later: '//Here one folio sheet of the manuscript is missing//'.⁴⁷ Neither remark is correct, as Marx's own handwritten manuscript shows. Instead, Engels failed to compile the corresponding pages in correct chronological and thematic order. The identical pagination of several pages of Chapters 6 and 7 confused him.⁴⁸

7 The Manuscripts Published for the First Time are Testimony that Marx has Recurring Difficulties in Realising His Ideal of a 'Dialectically Structured' 'Architectonic Whole'. His Process of Working is not a Sequence of Logical Thoughts and Steps Coordinated with Each Other.

To illustrate, I can give two examples:

a) Marx's first extensive manuscript for Book 1 (= *Manuscript 1*) from 1863/64 does not contain a first chapter 'Commodities and Money'. Instead, he started the manuscript with the chapter 'Transformation of Money into Capital'.⁴⁹ According to his draft plan of January 1863, Marx intended 'Commodities and Money' to be merely a sort of introduction. It would summarise the presentation of Part 1 of *A Contribution to the Critique of Political Economy*. Only in the autumn of 1866 does Marx decide to write an extensive first chapter for Book 1, after all. Too much time has passed for him to be able to refer to Part 1 of *A Contribution to the Critique of Political Economy*. This part was possibly only available second-hand by now, jettisoned by erstwhile buyers as the sad torso of an unredeemed and discontinued series. Whatever Marx may have

⁴⁶ See *MEGA*² 11/4.3, 2012, pp. 464–7.

⁴⁷ Karl Marx, *Capital. A Critique of Political Economy*, Vol. 3, Hamburg 1894. (*MECW*, vol. 37, p. 804 and p. 809; *MEGA*² 11/15, 2004, p. 792 and p. 797).

⁴⁸ See Vollgraf and Jungnickel 1995, p. 23. Engels's misfortune allows us to infer that Marx, much as he worked on problems of Book 3 in the 1870s, can hardly have put the manuscript of 1864–5 in order.

⁴⁹ Witness the preserved pp. 24–5 of *Manuscript 1* that deal with buying and selling the commodity 'labour capacity', the third item of Chapter 2 (cf. *MECW*, vol. 34, pp. 339–44).

thought, the difference in maturity of the presentations was probably decisive for him. '100 p. c. more comprehensible than No. 1,' he had remarked already in 1863 about parts of *A Contribution to the Critique of Political Economy* reworked in 1861.⁵⁰ In plain language, this means that Marx considered himself to have much better command of the material than four years earlier.

Engels in turn criticises this first chapter, hastily assembled in 1866 by Marx, when he checks the proofs in 1867: the treatment of the forms of value is well-nigh unintelligible.⁵¹ Earlier, Kugelman had already complained about a text that was heavy-going. To abandon the print-run was not feasible.⁵² Instead, Marx places a revised version of the forms of value in an appendix, 'for the philistine'.⁵³ He revises his initial exposition in the very same book – an unusual procedure in scientific publishing, but executed for a good reason.⁵⁴

For the second printing of Volume I (1872), Marx makes an effort to merge the two expositions of value, and thoroughly revises the chapter. Later he stipulates smaller changes for the third printing. Most readers – I take the liberty to say this on the basis of many years' experience with readers of Volume I of *Capital* – are not at all aware about the true story of this textual genesis. After being accustomed to the text of Volume 23 of the *MEW* (or *MECW*, vol. 35) for decades, we can easily overlook that when scholars say 'As Marx asserts in 1867 ...' they are in reality quoting from the fourth printing of 1890.

b) In 1864 Marx breaks off the work on *Manuscript 1* for Book 1. However, he does not turn to Book 2; instead he begins work on Book 3. He finds it far more interesting to focus on the question of the tendency of the rate of profit to fall – the crucial question to which Smith, Ricardo and John Stuart Mill had tied

50 Marx to Engels, 15 August 1863; *MECW*, vol. 41, p. 488; *MEGA*² III/12, 2013, p. 409.

51 Engels discussed this with Marx in May 1867 in Manchester.

52 There must have been correspondence with Meißner on this. Did it get lost together with the printer's copy?

53 Marx to Engels, 3 June 1867; *MECW*, vol. 42, p. 378; *MEW*, vol. 31, p. 301.

54 Marx also does not see reason to provide an introduction to the content and the aims of his work in general and of Volume I in particular. His lectures in 1865 on *Value, price and profit* (unnecessarily published in both Parts I and II of the *MEGA*², see *MEGA*² I/20, 2003, and II/4.1, 1988; *MECW*, vol. 20) attest to empathy for his listeners. This is not in evidence in large parts of *Capital*, and Engels reprimands him for this repeatedly and explicitly (see *MEGA*² II/4.3, 2012, pp. 434, 438 and 466–7). Marx assumes that others will build bridges to the proletarian reader by providing 'a succinct and popular résumé', and remarks jovially 'that one ought not to overload the minds of the people one is proposing to educate' (Marx to Carlo Cafiero (draft), 29 July 1879; vol. *MECW*, 45, p. 366; *MEW*, vol. 34, p. 384).

the fate of capitalism – than to pursue the rather dry issues of the circulation of capital and the successive transfers of value. Even the *Foundations of the Critique of Political Economy* contained next to nothing about the process of circulation. Only in 1865, when he fails to make progress on Book 3, does Marx fit in *Manuscript I* for Book 2.

In 1867, at the end of Volume I, Marx emphatically proclaims the historical fate of the capitalist mode of production. Is he to subsequently abandon this, slip into the role of the sober analyst and expound the steady circulation of capital in process and good health in Book 2? Marx would prefer to verify his prognosis of the historical fate in Book 3 on the basis of the tendency of the rate of profit to fall. In his letter of 30 April 1868, he presents the 'method by which the rate of profit is developed' to Engels in seven points, after touching on the subject matter of Book 2 in a full four sentences.⁵⁵

Marx is aware that, having made a static distinction between the labour-process, the process of creating value and the process of the production of surplus value in Volume I, he has to trace the process of transfer of flows of value in Book 2 using appropriate categories. But his sloppy treatment of Book 2 weighs heavily; the groundwork is lacking. Thus he makes three fresh starts on Chapter 1 of Book 3 in the summer and autumn of 1867, but includes a 17-page study of terminology which he entitles 'Fixed capital and circulating capital. Turnover cycles'. It is meant to clarify which of the terms are adequate to his theory of value, fixed or invested capital on one side, and circulating or liquid capital, or working capital on the other. Later, Marx fits the study into *Manuscript II* for Book 2 without having found a solution. Again, no decision is made.⁵⁶ Engels, who was not involved in the process of establishing the terminology, will continue to speak of invested capital and working capital years later.

One last thought on this point: Marx's economic manuscripts from between 1857 and 1881 differ in content and structure. It is neither convincing nor necessary to regard them as successive drafts of *Capital* beginning with the *Foundations of the Critique of Political Economy*. It is more reasonable, and more fair to Marx, to see them as texts for two projects that are, although of course related, conceptually distinct – drafts for the project *A Contribution to the Critique of Political Economy* (until 1863) and drafts for the project *Capital*. As Marx never clearly delineated these two endeavours, the formulation 'drafts for' is apt. I cannot go into detail here about Marx's numerous changes of plan

55 See *MECW*, vol. 43, pp. 20–5; *MEW*, vol. 32, pp. 70–5.

56 See *MEGA*² 11/4.3, 2012, p. 425 and pp. 439–40, and *MEGA*² 11/11, 2008, p. 918.

since the so-called six-book plan of 1858. It suffices to say, however, that in examining the plans sketched out by Marx one should always carefully check whether one is dealing with structural reflections about the work, or merely with establishing the next steps in writing.

8 Compared to Earlier Drafts, the Richly Illustrated Print Version of Volume I Signifies Marx's Breakthrough to the Empiria. His Spontaneous Intervention in Volume I in the Scientific Controversies and Questions of the Day Lead Him to the Empiria. His Subsequent Writings Increasingly Contain Empirical References.

In 1866, Marx describes his richly illustrated and drastic presentation, especially with regard to the working day, as a sketchy continuation of Engels's *The Condition of the Working Class in England* up to 1865.⁵⁷ In 1867, at the last moment, he adds pages of quotes from the latest reports on child labour and public health.⁵⁸ According to Marx, both reports deal a dreadful blow to the optimism of the bourgeoisie.⁵⁹ What additional dashes of colour might Engels have given to this presentation, if he had taken seriously Marx's proposal in 1866 to write an appendix on the capitalist 'industry for human slaughter', on the domination and subjugation of the worker by the machine?⁶⁰ Would the 'architectural whole' then have had a second annex alongside the revised form of value? The section on primitive accumulation, of which we do not know whether Marx would have kept it when he later revised Volume I, is also highly empirical.

How is Marx to achieve a similarly empirical presentation in Book 2 and 3? In Book 2, he could vividly portray the battle orders of opposed interests of buyers and sellers in the market, or illustrate the turnover of capital with reference to the railways (where large capital investments were involved that could be recovered only slowly). Marx could have weighed the advantages of the three forms of depreciation, which he has been asking Engels about for years, and vividly depict the fight of the railroad companies over transport tariffs and market shares. Such discussions are found in the two large drafts for Book 2 only in outline, although they are covered in Marx's reading and in his notebooks.

57 See Marx to Engels, 10 February 1866 (*MECW*, vol. 42, p. 224; *MEW*, vol. 31, p. 174).

58 See *MEGA*² 11/5, 1983, pp. 378–80, 401–4 and 531–6.

59 See Marx to Engels, 21 July 1866 (*MECW*, vol. 42, p. 296; *MEW*, vol. 31, p. 239).

60 Marx to Engels, 7 July 1866; *MECW*, vol. 42, p. 291; *MEW*, vol. 31, p. 234.

With regard to Book 3, Marx writes in a letter to Engels on 14 November 1868: 'Since the 2nd volume is largely too theoretical, I shall use the chapter on credit for an actual denunciation of this swindle and of commercial morals.'⁶¹ Thus, Marx intends to rework Chapter 5 of the *main manuscript* from 1864/65 into a 'chapter on credit', and now wants to substantiate properly the thesis he advances there: that the credit system develops into the 'purest and most colossal form of gambling and swindling'.⁶² He comprehensively notes excerpts from the standard text *Das Ganze der kaufmännischen Arithmetik* ('The Whole of Commercial Arithmetic') by Feller/Odermann, in order to understand the transactions of shrewd financial traders mathematically. His daughter Jenny looks through several hundred newspapers for articles on 'financial swindling concerns'.⁶³ Acquaintances collect material on French and German stock companies. Marx studies the German stock swindles [*Gründerschwindel*], and especially the '*cosmopolitan activity of loanable capital ... embracing the whole world in a network of financial swindling and mutual indebtedness, the capitalistic form of "international" brotherhood*'.⁶⁴ With regard to Book 3, in the 1870s Marx also reads everything that he can get his hands on regarding soil exhaustion and raising soil fertility – several dozen titles.

9 As Part of His Focus on Empiria, Marx Endeavours from the Mid-1860s to Formalise Crucial Subject Areas Mathematically.

The publication and analysis of the manuscripts after 1867 for Books 2 and 3 of *Capital* in the *MEGA*² will certainly lead to a re-evaluation of Marx's mathematical studies. He is evidently toying with the idea of mathematically formalising parts of his theory that deal with quantitative relationships. In this way, law-like relationships would be unambiguously expressed in very compact form.

In his *History of a Book*, Bauer writes that Marx

... referred the countless qualitative changes in the human *productive forces* to a mere quantitative change by conceiving of them as changes in the *organic composition of capital*. From this quantitative change follow,

61 Marx to Engels, 14 November 1868; *MECW*, vol. 43, p. 160; *MEW*, vol. 32, p. 204.

62 See *MECW*, vol. 37, p. 439; *MEGA*² 11/4.2, 1992, p. 505.

63 Jenny Marx to Louis Kugelmann, 27 December 1869; *MECW*, vol. 43, p. 548; *MEW*, vol. 32, p. 702.

64 Marx to Nikolai F. Danielson, 10 April 1879; *MECW*, vol. 45, p. 356; *MEW*, vol. 34, p. 373.

with the rigorous generality and necessity only available in the field of mathematics, the laws of motion of the *rate of surplus value*, the *rate of profit* and the *accumulation of capital*, which allow us to understand the concrete historical events of our time with respect to their determination by laws. Thus Marx provides us with the first mathematical law of motion of history.⁶⁵

Bauer argues that Marx wanted to quantify what was qualitatively not comparable, in order to be able to operate on it mathematically. This observation by Bauer (leaving aside the 'rigour' he saw in Marx) can be substantiated with text passages from all three Books. Marx's intention in fact does appear to evolve toward a mathematical foundation of the laws of motion of capitalist production.⁶⁶ This tendency is evident in his mathematical texts from 1867/68 and 1875 for Books 2 and 3, as well as in his admiration for the accuracy of Quételet's socio-critical predictions, in his acceptance of von Thünen's mathematical approach, and in his reflections on the role of mathematics in Hegel's and A. Comte's view of society. It placed him among the supporters of 'political arithmetic' who were interested in a 'social mathematics' (Condorcet). In 1878, the English economist William St. Jevons created a genealogy of mathematical-economic texts,⁶⁷ the best of its kind in Joseph A. Schumpeter's opinion.⁶⁸ According to Jevons's classification, Marx could be assigned to the most important group, whose aim was to consciously apply mathematics in order to discover law-like economic relationships.

Engels hardly pays attention to this, despite pursuing similar ambitions of finding laws of motion in the *Dialectics of Nature*. Instead, in 1885 he publicly and without foundation claims that Marx was 'well versed in mathematics'⁶⁹ and 'firmly grounded ... in algebra'.⁷⁰ The short texts on 'The Differential' which Marx had showed him in 1881, and to which Engels refers, are not available to others for inspection. They can only assess Engels's praise by inspecting

65 Bauer 1908, pp. 31–2.

66 Henryk Grossmann hoped to find the mathematical proof of the collapse of capitalism in Volume III of *Capital* (Grossmann 1929, p. 195).

67 Jevons 1878, pp. 398–401. In 1879 also, in the second edition of his *Theory of Political Economy*.

68 See Schumpeter 1906, p. 31.

69 Engels, *Herr Eugen Dühring's Revolution in Science*, Prefaces to the Three Editions, II (MECW, vol. 25, p. 11; MEGA² I/27, 1988, p. 494).

70 Engels, in Karl Marx, *Capital. A Critique of Political Economy*, Vol. II (MECW, vol. 36, p. 283; MEGA² II/13, 2008, p. 262).

Volume III of *Capital*. And here, as we know, the verdict is devastating. I merely refer to von Bortkiewicz, the best versed in this respect among the reviewers: 'scant familiarity of the author with the mathematical mode of thought'; 'he had no grasp of slightly more complicated quantitative relationships'; 'low mathematical aptitude'.⁷¹ Von Bortkiewicz is assessing a Marx text from 1864/65 in 1906/07.⁷² His criticism would likely have been somewhat more qualified, if he had had access to Marx's reflective texts from 1867/68. Because here Marx does what von Bortkiewicz demands in economic theory: he differentiates between the entire capital advanced and the capital actually employed, or spent, during a production period.

Marx is aware of his ostentatious layman's use of higher mathematics. In 1872 he removes some of his many mathematical allusions in the second printing of Volume I. I was able to answer the question what might have caused him to do so⁷³ by studying his mathematical notebooks in the original. In 1870/71, inspired by his study in 1868 of von Thünen, Macleod and Dionysius Lardner,⁷⁴ and at the same time highly dissatisfied with his ponderous exposition of reproduction schemas in *Manuscript 11* for Book 2, Marx began four notebooks on algebra.⁷⁵ The deletions in the second printing of Volume I are evidently a consequence of these mathematical studies.

On the algebraic notebooks I can say only this: they relate to the mathematical tools which an economist needs to be able to discuss marginal values, maximums and minimums, relationships, variations and combinations of economic quantities and additionally derive categories from a logical stringent (transform). Marx does not traverse topics in algebra 'on stilts'. His earlier arrogance – if one browses through his algebra (1858) – has yielded to humility. A phase of 'mental relaxation' – an expression used by Lafargue that is still being circulated even today – is not in evidence. In particular, it bothers Marx that the strictness of mathematics, which he touted on every occasion in the 1850s,

71 von Bortkiewicz 1906–7, pp. 479–81.

72 I leave out of consideration that von Bortkiewicz's mathematical dissection of Marx's efforts took place only after 40 eventful years, during which major developments in both mathematics and economics occurred.

73 See Vollgraf 2013, pp. 127–8.

74 While Marx is working on Chapter 1 of *Manuscript 11* in 1868, he engages intensely with the well-known book of the Irish polymath Dionysius Lardner, titled *Railway economy. A treatise on the new art of transport, its management, prospects, and relations, commercial, financial, and social*. In Chapters 12 and 13, Lardner offers a number of formulas for the economic quantities he calculates, and in Chapter 13 a graph of a bell curve.

75 The paper of the chronologically fourth notebook has a watermark with the date 1871.

leaves much to be desired. The authors use different terms and symbols; they follow different paths to formal solutions; they either accommodate to laymen, or else leave them far behind. English mathematicians, steeped in the tradition of Newton, take a different approach than their French or German counterparts.

An analysis of Marx's reading effort shows that he was unjustly criticised for having ignored 'neoclassical' economics (or at least had not been sufficiently familiar with it). In the case of Jevons, it has emerged that Marx becomes aware of a number of his works in the 1870s.⁷⁶ The names von Thünen, Lardner and Macleod, all in Jevons's intellectual genealogy, have already been mentioned; more could be added. Let us not forget the leads provided in the sources that Marx studies. In 1857 and the following years, his ever-reliable 'literature advisor' Wilhelm Roscher draws his attention to attempts by Canard, Krönke, von Buquoy, Lang, von Thünen, Rau, von Mangoldt and Cournot to express economic laws in mathematical formulas. In 1871, Roscher adds: Jevons.⁷⁷ An example from studies in earlier days: under the heading 'to buy or otherwise procure', Marx's 'Notebook from the years 1844–1847' contains the entry: 'Canard (N. F.) Principes d'économie politique. Par. 1801. in–8. (Oekonomie algebraisch.)'.⁷⁸ Marx took the title and the description from Adolphe Blanqui's *Histoire de l'économie politique en Europe ...*⁷⁹ In his reading of Jean-Baptiste Say's *Traité d'économie politique* and Charles Ganilh's *Des systèmes d'économie politique ...* in 1844/45, Marx had also encountered Canard and his critique.⁸⁰

The above reproaches are moreover not fair. After all, it is bourgeois economics itself that was for decades on bad terms with mathematical economics, regarded as the wayward child of its own scientific development, right up to the famous *Methodenstreit*.⁸¹

76 See Vollgraf 2013, p. 129.

77 See Roscher 1857, p. 36. It is possible that Roscher's polemics against the mathematical economists played a role in stimulating Marx to concern himself with algebra in 1858 and the following years.

78 Karl Marx, 'Notebook from the years 1844–1847'; *MEGA*² IV/3, 1998, p. 8.

79 Blanqui 1842, p. 409.

80 See *MEGA*² IV/3, 1998, p. 414.

81 That Cournot resignedly reworked the second printing of his *Recherches sur les principes mathématiques de la théorie des richesses* is noted in every essay about him. It is also known that Gossen was in effect not available in Germany, and that Walras failed to find a translator for a long time. Less well known is the trick that Kleinwächter pulled in 1871, when he published von Mangoldt's *Grundriß der Volkswirtschaftslehre* ['Outlines of Economics']. In Chapter 3 he replaced graphs and formulas by text, stating that he had found it 'nearly impossible' to 'acquaint myself with the thought that graphical

10 **Marx Turns His Attention to a New Field of Research, the Successive Undermining of the Metabolism of Society by Developed Capitalist Production.**

Marx does not succeed in proving the tendency of the rate of profit to fall. Anyhow, the decrease can be compensated for by an increase in the total profit. But mass production or steady growth of production implies depletion of the main sources of social wealth: labour power, soil quality and natural resources. It seems that, as the irreversible evolution of capitalist production toward mass production proceeds, Marx regards this depletion as a weightier, and indeed a more existential argument for the envisaged abolition of the dominant mode of production, than the capitalist mode of appropriation or the tendency of the rate of profit to fall. I will comment more about that on another occasion.

In conclusion, one last thesis:

11 **The Global Textual Monopoly of Volumes 23–5 of the Marx-Engels Werke (MECW 35–7) has been Broken by the Publication of All Printings and Editions of Volume I of *Capital*, and All Preparatory Works.**

In 1933, almost all copies of *Capital* in German public libraries, university libraries, scientific institutes and governmental institutions were destroyed in a barbaric public burning of Jewish and socialist literature. The *MEGA*² has put this historical scandal right. With volumes 11/5 to 11/10, it has made all printings of Volume I available to the scientific public again. UNESCO, too, has corrected the disasters of the past, and accepted Volume I of *Capital* (alongside the *Manifesto of the Communist Party*) into the world's literary heritage.

Further, with the publication of all manuscripts by Marx for Books 2 and 3 of *Capital* in the *MEGA*², the interested reader is no longer at the mercy of the one-sided interpretations of privileged specialists (whatever side they may take). He can explore the stages of elaboration of *Capital* case by case. For the first time, the reader can compare the 'raw' versions by Marx with the edited

representations and mathematical formulas should facilitate an understanding of the economic laws', and adding that Adolph Wagner shared this view (Kleinwächter 1871, p. vi). It is, incidentally, naïve to think that Marx's total reading effort is exhaustively represented by titles mentioned in his excerpts, or in remarks made in his correspondence.

versions by Engels, and make his own judgement about the very considerable difficulties which Engels faced – in matters of form and content – when he compiled Volumes II and III of *Capital*.

This happy state of affairs may seem to some to be the result of the objective editorial work done mainly over the last 25 years. But in fact the possibility of an undogmatic disclosure of the manuscripts of *Capital* was already among the most important intentions of the founders of the *MEGA*¹. In his lecture given at the end of 1923, referred to earlier, Rjazanov states:

All Russian Marxists who have dealt with Volume II of *Capital* always wondered whether it might be possible to obtain this Volume II in its original form, as Marx left it, in order to be able to use Engels's edition alongside it as a commentary. It occurred to many of us, that Engels may have been somewhat subjective. A closer acquaintance with the content of the recovered manuscripts has confirmed me in this belief, in particular with regard to Volume III of *Capital* ... It can ... be stated with certainty that Volume III of *Capital*, while presenting subjects sketched and worked on by Marx, is still only a variant by Engels.⁸²

The Soviet edition of the works of Marx and Engels did not shy away from pointing out differences between the two thinkers, Rjazanov wrote (no doubt with an eye to Kautsky and his own comrades). As cited above, Rjazanov announced the complete edition of all drafts and variants. Only a few years later, the proclamation of the unity of Marx and Engels became a basic ideological law in Rjazanov's native country, and precluded the editorial project for several decades. Whoever did not bow to these 'laws' lived dangerously. Some of the editors of *Capital* in Moscow fell victim to the Stalinist purges in 1931. Benedikt Kautsky had no way of knowing this when he complained in 1957 that the Marx-Engels Institute in Moscow still owes the scientific public the 13 volumes with Marx's preparatory work for *Capital*, promised 30 years earlier, and that this makes it impossible to trace the process of transformation of Marx's theory after 1857/58.

Now, nearly six decades later, this inquiry has become possible. The *Capital* part of the *MEGA*² has created a very productive situation of scientific disquiet. Scholars can no longer quote *MEW*, Volumes 23–5 (*MECW*, Volumes 35–7) and be certain that they have authentically reproduced Marx's wording, or the location of the passages in the text. That brings out the importance and the opportunity offered by the *MEGA*²: it enables the reconstruction of Marx's

82 Rjazanov 1925, p. 393.

creative process. While the *MEW*, Volumes 23–5, of *Capital* present the first, more or less finished outcomes of Marx's economic creative process – and, as it were, bury the research process behind them – the *MEGA*² for the first time documents this research process itself, in its complete width and with all its ramifications.

Marx after the *MEGA*² Edition: A Comment*

Heinz D. Kurz

1 Introduction

Carl-Erich Vollgraf has an intimate knowledge of Part II of the *MEGA*², which is devoted to the material that was supposed to lead up to *Das Kapital* – a project Marx failed to finish. Vollgraf has the contents of the texts at his fingertips, and knows their chronology and architecture. This provides him with a judgement on the matter which I do not possess. Although I have read some of the manuscripts which are now available for the first time, my reading was motivated by specific research questions, and not by the intention of obtaining an overall picture of the works collected there and their complex genealogy. I was especially interested in the similarities and differences between Marx's theory and the theories of the classical British economists, David Ricardo in particular, on the one hand, and the modern representatives of the classical approach, in particular Piero Sraffa, on the other. My recourse to the *MEGA*² was motivated by the issues which interested me, and my attention went to what Marx said about those – whether he changed his views over time, and how he changed his views – about continuity and change in the determination of the general rate of profits and prices of production; the theory of the rent of land; the 'law of motion' of the capitalist economy as it is reflected in the long-run tendency of the rate of profits, and related issues. So my approach was selective, rather than comprehensive. Consequently, I can comment only on some parts of Vollgraf's textual exegesis. However – as far as I can see – Vollgraf's paper is a faithful representation of, and reflection on, Marx's manuscripts. We should thank Vollgraf for providing us with an informative account of some of the contents of Section II, and for having contributed further elements to the much-needed explanation of why Marx did not succeed in completing his *magnum opus*.

* I am most grateful to Jurriaan Bendien for his excellent copyediting of my paper. Actually, his work went far beyond what copyeditors typically do and improved not only the prose of the manuscript a great deal, but also its content. I am afraid to say that due to time constraints I could not answer all his queries and absorb all his suggestions when preparing the final version.

Given my broad agreement with Vollgraf, I will limit myself to adding a few points I consider relevant. In section 2, I will discuss briefly why the *MEGA*² enables – and in fact makes necessary – a new concern with Marx's political economy. Section 3 identifies some statements by Vollgraf which I do not share, or about which I think some further discussion is needed. Section 4 locates Marx's political economy in the history of economic thought: was he, as Paul A. Samuelson once queried, the 'odd man out', a 'crank', whose contribution defies any conventional classification and assessment, or was he a 'minor post-Ricardian'?¹ Was he a 'genius' of political economy, whose statements contain indubitable truths, as some of his followers at the conference seemed to think? And if he was, how is it that not all readers grasp this alleged fact? Section 5 offers a concluding remark.

2 Marx after the *MEGA*²

I agree with Vollgraf that only now has 'Marx ... joined the real classics'. He expounds: 'Everyone can now approach his work freely, and interpret its content in new and different ways'. The *MEGA*² edition provides everything that is available from Marx and Engels's hands on the issues under consideration, and, a few exceptions aside, the so-called 'really existing socialist regimes' that previously imposed bans on critical thinking about Marxiana no longer exist today. Thanks to the *MEGA*² edition, the veil is now lifted, and uncertainty is removed. All cards are on the table, and all hopes have vanished of new literary discoveries that could solve outstanding puzzles and eliminate inconsistencies in Marx's writings.

If, in the light of the newly available evidence, Marx's theories turn out to be more problematic or untenable, will this prompt a revision of interpretations made by scholars who, in the past, invested their intellectual capital in expounding Marx? We will have to see. I have my doubts. The 'sunk costs' still weigh heavily in the present context. They can be expected to prevent some colleagues from admitting they were wrong and revising their views

1 Paul A. Samuelson raised the question of whether Marx had been 'a genius or a crank' in Samuelson 1967, pp. 616–23. In his essay 'Economists and the history of ideas' (Samuelson 1962a, p. 12) Samuelson commented famously that 'From the viewpoint of pure economic theory, Karl Marx can be regarded as a minor post-Ricardian'. Years later, Samuelson claimed that this comment had been 'a blunder', and that in truth he regarded Marx as 'a scholar deserving of analysis on his objective merits and without regard to the deification or denigration meted out to him in various regions and ideologies' (Samuelson 1986, p. 263).

accordingly. We can, however, safely expect the ‘demystification’ of Marx, the ‘shedding of illusions’ about him.

Ironically, Marx’s greatest impact was political – the formation of ‘socialist’ regimes. This is surprising, if only for the reason that Marx wrote relatively little about the kind of socialism he envisaged. In the so-called ‘socialist’ societies, political elites based their claims to leadership on the axiomatic belief that they were the faithful carriers and executors of the commandments of Marx, Engels and Lenin. Typically an abuse of Marx’s intellectual work in petty power games was involved. We do not know how Marx would have reacted to ‘actually existing socialisms’, but there is reason to believe that he would have been as mercilessly critical about them as he was about capitalism. He would certainly have found the personality cult that formed around himself and other ‘patron saints’ of socialism unbearable. In a recent review of the *MEGA*² edition, I asked speculatively and rhetorically: ‘What would have happened if this *MEGA* project had been completed shortly after Marx’s death, and Marx’s own doubts and self-criticism had become known? Would his statements have been treated as set in stone, as the words of a prophet? That is improbable. Instead, we could play a variation on our theme of the invisible hand: real existing socialism as an unintended consequence of the publication of the first volume of *Das Kapital*! What a historical irony.’²

The interpretation of Marx’s writings degenerated into what different polit-buros decreed it should be. It became a dogma – untouchable, until a palace revolution brought a new set of people to power, and the old dogma was readjusted according to their needs and wants. I well remember how, as a student at the University of Munich in 1969, I wrote my diploma thesis in economics on ‘Marx’s law of the falling tendency of the rate of profits’.³ In the hope and expectation of gaining some additional insights about this complex matter, I consulted the GDR’s official textbook on political economy⁴ – only to be utterly disappointed: the huge tome had nothing of interest to say on the issues that concerned me – it was boring dogmatism through and through. It was clear to me that, under the kind of ‘socialism’ in which such a volume could be produced, Marx had been embalmed and mummified. You were allowed to look at the mummy, but you had to ‘keep mum’.

The question today is: how long will it take until dogmatic Marxists will absorb the messages of the *MEGA*², and abandon their previous views? How

² Kurz 2013a, p. 849.

³ Kurz 1969.

⁴ Akademie der Wissenschaften der UdSSR 1964.

long will it take to absorb the findings of the analytical literature inspired by the classical economists, from Ladislaus von Bortkiewicz via Georg von Charasoff to Piero Sraffa? For how long will the labour theory of value still be considered an indispensable part of sound political economy? For how long will people cling to Marx's explanation of the tendency of the general rate of profits to fall? Was Marx really the luminous figure that never erred, at least not for long, as some people still seem to think?

The answer to the last question is obviously negative. To be sure, Marx was a great social scientist, a towering figure in political economy, to whom we owe important insights. He clearly belongs to the 'pantheon' of economists, as one of the most severe critics of capitalism, along with its most ardent admirers like Friedrich August von Hayek. Yet Marx was not infallible. Both Marx and Hayek have devotees among their followers who treat their respective analyses as 'revelations': social theory as a substitute for religion. Well, the *MEGA*² makes life difficult for the unconditional worshippers of Marx. It is to be hoped that sobriety and critical scrutiny will eventually prevail in the scholarly interpretation of his writings.

When Vollgraf writes that Marx has now joined the 'real classics', a meaning resonates in this assessment which Vollgraf himself probably did not intend: a Marx who is firmly entrenched in the tradition of classical political economy of Adam Smith, David Ricardo and Robert Torrens.⁵ Marx left no doubt that he learned a great deal from these and some other authors, and especially from Ricardo. In fact Marx clearly demarcated classical political economy from what he dubbed 'vulgar economics': while the former had investigated the essence of capitalism, the latter had only dealt with surface phenomena.⁶ But he also detected errors in the classical analyses, big ones and small ones, and he

5 By focusing attention on Marx's relationship with the British classical economists, I do not wish to deny in the least the influence French political economists had on his work. It is well known that in the 1840s Marx was first exposed to the French literature, and only later studied the British economists. On the concept of 'classical' economics, which is entertained here in the tradition of Piero Sraffa's path-breaking contributions, see Kurz 2012 and Kurz and Salvadori 2014. On Ricardo's contribution, see Kurz 2015.

6 'Once for all I may here state, that by classical political economy, I understand that economy which, since the time of W. Petty, has investigated the real relations of production in bourgeois society, in contradistinction to vulgar economy, which deals with appearances only, ruminates without ceasing on the materials long since provided by scientific economy, and there seeks plausible explanations of the most obtrusive phenomena, for bourgeois daily use, but for the rest, confines itself to systematising in a pedantic way, and proclaiming for everlasting truths, the trite ideas held by the self-complacent bourgeoisie with regard to their own world, to them the best of all possible worlds' (*MECW*, vol. 35, p. 91).

exposed them mercilessly – occasionally in a pedantic and petty fault-finding manner. Marx was not only a towering thinker who had his moments; he could also be a ‘comma hunter’ who loved to polemicise against and reprimand his intellectual precursors. Among some readers of his works, these characteristics of Marx have apparently created the impression that Marx was at war with classical economics in its entirety. This impression is, however, deceptive. The subtitle of *Das Kapital* (*‘Zur Kritik der politischen Ökonomie’*) cannot blur this fact. Marx was concerned with identifying propositions and doctrines in classical economics that are untenable; he provided reasons why he thought they were wrong; and he elaborated what he considered to be correct views of the topics under consideration. This is fair enough, and an integral part of any critical disquisition. Marx continued to weave the carpet he inherited from the classical authors, intending to eliminate flaws in their works. By starting from the classical authors, and adopting from them whatever he felt was sound and convincing, his aim was to improve our understanding of the capitalist mode of production, its law of motion and its final destiny. His analysis, Marx hoped, would at the same time contribute to the making of a better world, in which the exploitation of man by man would finally end.

This hope has not materialised, and capitalism has not died, while systems that were called ‘socialist’ tumbled like houses of cards a few years ago – to the great surprise of basically all observers. An important reason for this was the low efficiency and low innovative ability of these systems. Marx bears no responsibility for Soviet-type communism or ‘actually existing socialism’ of the East-German variety – a regime of petty-bourgeois officials. But the usurpation of Marx by state functionaries in the past could badly affect the picture we have of him for a long time into the future, and make an unprejudiced scrutiny of his work difficult.

What matters here is a sober assessment of the merits and demerits of Marx’s contribution to political economy. Such an assessment shows how Marx succeeded in overcoming some of the deficiencies of classical political economy. At the same time, it shows which problems he could not solve, and also that his way of tackling problems which classical authors (especially Ricardo) left unsolved gave rise to new difficulties. Vollgraf rightly emphasises that Marx’s work on *Das Kapital* ‘was not a linearly ascending process of knowledge acquisition’, and he adds: ‘Marx’s work is much more a chequered process of advances and stagnation’. *Mutatis mutandis* the same can be said about the classical approach to the theory of value and distribution in general, in which I include Marx’s contribution. While Marx managed to advance that approach, he retarded its further progress at the same time. The element of retardation was, of course, his insistence on the ‘law of value’, and his claim that labour was

the only source of value (see below, Section 4). I contend that, in the course of his studies of political economy, Marx's understanding of the achievements of Ricardo grew, and that he saw more and more clearly that Ricardo's analysis was the real challenge. In another context, Vollgraf speaks of Marx's 'earlier arrogance' which eventually 'yielded to humility'. With regard to Ricardo, Marx always showed a fair amount of respect, despite frequently biting and occasionally pedantic criticisms. As time went by, it appears that this respect grew a great deal. On various issues, Marx was keen to advocate a position diametrically opposed to the one Ricardo held, the most important case in point being his explanation of the falling tendency of the rate of profits. And, in several such cases, Marx failed. Ricardo's contribution turned out to be a hard nut to crack, frequently too hard for Marx.

3 Open Questions, Answers to be Questioned

Before briefly discussing the relationship between the analyses of Marx and Ricardo, I will touch upon a few statements by Vollgraf with which I do not fully agree, or for which I think some further explanation is in order.

1. The first of Vollgraf's eleven theses reads: 'To the very end Marx upholds his vision and conviction that capitalism must be abolished. This is the common thread, the fundamental coherence and the constant in his multifaceted work across four decades'. His formulation 'must be abolished' has a voluntaristic ring to it. In places, Marx's writings do indeed breathe political voluntarism. However, according to my reading of Marx, he was of the opinion that capitalism procures its abolition itself. His historical materialism predicted the self-transformation of society. Political voluntarism was not its gravedigger; the major task of 'scientific socialism' was to unravel the 'law of motion' of capitalism and the inevitability of socialism. The forces of history were said to develop 'behind the backs' of self-interested agents, with the unavoidable demise of capitalism being the unintended outcome of self-seeking behaviour.⁷ Vollgraf cites Otto Bauer, who contended that 'Marx provides us with the first *mathematical* law of motion of history' (emphasis added). Bauer and many of his contemporaries apparently thought more highly of Marx's mathematical prowess than we have reason to do nowadays. While the march to socialism might be 'accelerated' by actions of the working class, trade unions and socialist

7 See Kurz 2013c.

parties, they were viewed in Bauer's circles as part and parcel of an overarching historical process that unfolded unwaveringly.

What I find remarkable though, is that Marx apparently could not imagine that a society in transition from capitalism to socialism might jump 'out of the frying pan into the fire'. There is also the question of whether he would have allotted some role for markets and competition under socialism, and how he would have thought that the problem of incentives could be taken care of, how a mood of sustained solidarity could be established, and so on. He was very clear that, in capitalism, unemployment – the 'reserve army' of the unemployed – was a systemic device to keep up workers' working morale. Did he think that, under socialist full employment, labour productivity would miraculously be kept high, so that the incentive problem could be ignored?

It is a pity that we find in Marx relatively little about what constitutes the 'good society', and which institutions, laws and regulations are necessary to achieve and preserve it. The socialist paradise remains surprisingly pale and opaque in his writings. Authors such as David Hume and Adam Smith based their analyses on a philosophical anthropology whose aim was to identify the physical, mental, psychic etc. properties of man. This was then used as the foundation of a theory of institutions, regulations, policies etc. designed to bring about the 'common good', or, as Francis Hutcheson put it famously, 'the greatest Happiness of the greatest number'.⁸ Interestingly, an important (if not the most important) task of *The Wealth of Nations* was to provide – as Smith emphasised – a 'science of the legislator'⁹ that would allow statesmen to foster good government. It is a pity that Marx did not follow Smith and other classical economists in this regard, and did not formulate principles upon which to base institutions – principles that certainly would have challenged the functionaries of 'really existing socialism'. Had Marx's oeuvre contained a code of conduct for really existing rulers, it might perhaps have prevented some of the atrocities that happened!

2. Vollgraf appears to rate Marx's mathematical skills much higher than I do.¹⁰ In view of the available evidence, there can be little doubt that Marx did try hard to improve his own mathematical knowledge. Vollgraf rightly emphasises that there is no ground for believing that Marx engaged in exercises in

8 Hutcheson 2004, p. 125.

9 Smith 1979, I, book IV, ii, at p. 468.

10 In this regard, I side with Bortkiewicz (1906–7, p. 56), who traced Marx's inability to provide correct solutions to the problems he raised back to the 'meagreness of his mathematical abilities'.

algebra and arithmetic for the sake of 'mental relaxation', as Paul Lafargue once claimed.¹¹ Just look at Marx's arduous calculations of the forces affecting the rate of profits – an excruciating effort! That Marx would be particularly impressed by Johann Heinrich von Thünen's work is easy to understand. Thünen was an original thinker, equipped with the mathematical tools to formalise his ideas and control for their internal consistency. He mastered differential and integral calculus, and knew how to use them skilfully in studying what were mostly static partial equilibrium problems. Marx was also a highly original thinker, but the problems to which he applied himself were much more difficult. They concerned problems of dynamics and general disequilibrium. For many of the problems he struggled with, adequate mathematical tools had not yet been invented.¹² For example, in dealing with the problem of value and distribution in a multi-sectoral economy, the Perron-Frobenius theorem (or some equivalent tool) developed around the turn of the twentieth century would have been of great help. Mathematical instruments for the analysis of irregular endogenous fluctuations were developed only much later.

Marx obviously cannot be blamed for all this. What can be said, however, is that in a number of important respects his intuition let him down – this was the case especially with regard to the determination of the general rate of profits, and, *a fortiori*, with regard to the long-term tendency of that rate vis-à-vis technical progress. On both issues, Ricardo showed a better intuition, as I argue in the next section.

A general observation is apposite here. Economics is a discipline confronted with a very complex subject matter. In the course of its history, we can often notice that its tools – mathematical or otherwise – were not adequate to the problems being dealt with. Marx was therefore in good company. It is hardly surprising that, equipped with better analytical tools, economists such as Ladislaus von Bortkiewicz, Piero Sraffa or Nobuo Okishio could provide correct and conclusive answers to problems which earlier authors failed to solve. I have no doubt whatsoever that if Marx had been able to use these tools, he would have done so, and accordingly would have corrected his earlier views. He was an intelligent man, and he would not have clung to doctrines that simply cannot be sustained. I wonder what he would have thought of those 'Marxists' who consistently refuse to take into account new findings, and look at Marx as if he had spoken *ex cathedra* – proclaiming 'only truths and nothing but truths'.

¹¹ Lafargue 1972.

¹² Leontief 1938, pp. 1–9, at p. 3.

3. Vollgraf writes: ‘An analysis of Marx’s reading effort shows that he was unjustly criticised for having ignored “neoclassical” economics (or at least had not been sufficiently familiar with it)’. Vollgraf provides a number of useful hints about where and when Marx referred to relevant authors, some of which might be considered as forerunners of marginalist (neoclassical)¹³ views – including, of course, William Stanley Jevons, who is commonly considered one of the founders of that school, together with Carl Menger and Léon Walras. It recalls a view Friedrich Engels already expressed in the preface of his edition of Volume III of *Das Kapital* (1894). His reference was to Wilhelm Lexis on the one hand, who, according to Engels, had advocated a ‘vulgar socialism’, and to George Bernard Shaw, who, as is well-known, had been a staunch supporter of Marx’s doctrine before he defected to marginalism. Interestingly, Engels opined:

[I]t is just as easy to build up an at least equally plausible vulgar socialism on the basis of this [vulgar] theory [of the source of profit], as that built in England on the foundations of Jevons’s and Menger’s theory of use value and marginal utility. I even suspect that if Mr. George Bernard Shaw had been familiar with this theory of profit, he would have likely fallen to with both hands, discarding Jevons and Karl Menger, to build anew the Fabian church of the future upon this rock.¹⁴

Leaving aside that Engels’s reference appears to be to Carl Menger, the so-called ‘founder’ of an ‘Austrian School of Economics’, and not to his son Karl, the mathematician (who at the time had not yet been born), Engels fundamentally misunderstood the thrust of the marginalist doctrine. This doctrine, and especially its ‘*marginal productivity*’ part, were developed to ward off the socialist assault on capitalism, by arguing that profits were not based on exploitation, but adequately reflected the marginal contribution of a particular factor of production, capital, to output, just like the factors labour and land.¹⁵

13 I prefer the term ‘marginalist’, because this was the term used by the innovators themselves, whereas the term ‘neoclassical’ was invented only at the beginning of the twentieth century, apparently under the spell of Alfred Marshall’s interpretation of the classical economists as precursors of the marginalists, so that the term *Neoclassicals* was given to the latter. However, there are fundamental differences between the classical authors from Adam Smith to David Ricardo and the marginalists from Jevons to Marshall and beyond. For a comparison between the two, see Kurz 2015, chapters 2 and 4.

14 Marx 1959, p. 10.

15 Kurz 1995.

The crux of the matter is this: when Marx was writing, that is, before marginal productivity theory began to filter into academic and public discourse, one might still have been content with the observation that positive profits presuppose a positive surplus value (or surplus labour). Once marginalist theorists had argued that profits do not express exploitation, but the 'productivity-enhancing effects' of employing capital, an entirely new situation emerged in economics. What if marginal productivity theory happened to be correct? Paul Samuelson's concept of the 'surrogate production function' purported to show, for example, that marginal productivity theory and the labour theory of value are not incompatible with each other, quite the contrary.¹⁶ Marginal productivity theory was designed to pull the rug from under the feet of the socialists. What was needed was a demonstration that marginal productivity theory in its various forms *cannot* be sustained. In this context, I can point out that, in a note written on 16 January 1946, Piero Sraffa had already anticipated *ante litteram* the flaw in Samuelson's argument, and also in the argument of several Marxists who still cling to the labour theory of value. Sraffa wrote:

The Irony of it is, that if the '*Labour Theory of Value*' applied exactly throughout, *then, and only then, would the 'marginal product of capital' theory work!*

It would require that all products had the same org.[anic] comp.[osition]; and that at each value of *r* [rate of interest or profits] *each* comm.[odity] had an 'alternative method', and that the relations within each pair should be the same (i.e. that marg.[inal] prod[uct]s. should be the same; and also the elasticities should be the same); so that, even when the System is switched, and another Org. Comp. came into being, it should be the same for all products.

Obviously this would be equivalent to having only one means-product (wheat).

Then, commodities would *always* be exchanged at their Values; and their relative Values would not change, even when productivity of labour increased.¹⁷

16 Samuelson 1962b.

17 Sraffa Papers D3/12/16: 34; Sraffa's emphases. The reference is to Sraffa's papers kept at Trinity College Library, Cambridge (UK), catalogued by the archivist Jonathan Smith. Passages underlined by Sraffa are given in italics.

Hence, defining profits as surplus value, and the net product as value added, cannot *by itself* support the claim that profits are based on exploitation: marginal productivity theory has to be refuted.¹⁸

This does not seem to have been clear to Engels, and it does not seem to be clear to many contemporary Marxist economists either. Had it been clear to Marx, of which I know of no compelling evidence, the troubled last years of his life would probably have been still more chagrined.

4 Marx and Ricardo

In 1948, Paul Samuelson asked Piero Sraffa whether Ricardo held a labour theory of value. Sraffa is reported to have answered: 'He did and he didn't'.¹⁹ At first sight, it looks like a sibylline response. In fact, it properly reflects Ricardo's point of view – as stated, for example, in the third edition of the *Principles*, when Ricardo speaks 'of labour as being *the foundation of all value*, and the relative quantity of labour as *almost exclusively* determining the relative value of commodities'.²⁰ Labour is absolutely indispensable in human production, but the values of single or compound commodities, such as the social product or the capital employed in the economy, are *not* exclusively determined by the quantities of labour embodied in them. Marx agreed with Ricardo that this was true with respect to the exchange ratios of any two commodities. Prices of production systematically deviate from labour values, that is, the amounts of direct and indirect labour expended in the production of the commodities. This deviation is due to the impact of the distribution of income – the rate of profits which corresponds to a given real wage rate (below its maximum level) – on relative prices. However, in opposition to Ricardo, Marx claimed that what applies to single commodities does not apply to *aggregates* of commodities: from the point of view of aggregates, his *fundamental hypothesis* was that the 'law of value' applies. This is to say, the price expressions of the gross product, the surplus product, and the capital employed are all proportional to their labour-value expressions. With regard to aggregates, Marx believed that a sort of 'conservation law' held true for the labour expended in production and stored up in commodities.²¹ That means, in particular, that the key variable of the

18 See Kurz and Salvadori 1995, chapter 14.

19 Paul A. Samuelson, in Kurz (ed.) 2000, p. 139 and Kurz (ed.) 2013, p. 31.

20 Ricardo 1951, p. 20; emphasis added.

21 Some people seem to think that the labour theory of value is obvious and straightforward. However, it is far from that. See, on this issue, Kurz and Salvadori 2009 and 2013.

system, the *general rate of profits*, can be ascertained exclusively in value terms, because ascertaining this rate in price terms arrives at exactly the same result:

$$\text{Rate of profits} = \frac{\text{Surplus product in labour value terms}}{\text{Capital in labour value terms}} = \frac{\text{Surplus product in price terms}}{\text{Capital in price terms}}$$

That was Marx's fundamental hypothesis – reflecting what he considered to be the 'law of value'. Alas, it remained a hypothesis, because he never managed to establish its correctness. There is even reason to presume that, in his view, a proof of it was not really required because, once stated, this 'law' appeared to him to be as clear as daylight – so why bother with proofs? Legions of true believers followed him in this regard, and a few are still willing to follow him today. Yet, as we know now, the hypothesis cannot be sustained, other than in very special (and in fact uninteresting) cases. Clearly, neither a zero rate of profits, nor equal organic compositions of capital across all industries, nor a surplus product and a capital that exhibit the same organic composition can mimic the reality of capitalist economies.

The irony is, therefore, that precisely on *the* issue about which Marx felt that his analysis involved a quantum leap forward in the elaboration of a coherent theory of value and distribution, he erred. Ricardo's analysis, to be sure, exhibited several shortcomings, and Marx spotted some of them. But Marx did not succeed in replacing Ricardo's analysis by one that is superior in many respects, without being inferior in even one. Marx's fundamental hypothesis is wrong, and has misled generations of his followers to chase after a will-o'-the-wisp.

The following note which Sraffa wrote in November 1927 could be read as a comment on Ricardo's statement about labour being '*the foundation of all value*', and the relative quantity of labour as *not* '*exclusively* determining the relative value of commodities'. Sraffa wrote:

It is the *whole* process of production that must be called 'human labour', and thus causes all product and all values. Marx and Ricardo used 'labour' in two different senses: the above, and that of *one* of the factors of production ('hours of labour' or 'quantity of labour' has a meaning only in the latter sense). It is by confusing the two senses that they got mixed up and said that value is proportional to quantity of labour (in second sense) whereas they ought to have said that it is due to human labour (in first sense: a non-measurable quantity, or rather not a quantity at all).²²

22 Sraffa Papers D3/12/11: 64; emphasis in the original.

Confusion of these two senses appears to have contaminated discussion about the theory of value for almost two centuries. The confusion comes well to the fore in Marx's letter to Ludwig Kugelmann, dated 11 July 1968, in which he wrote: 'The chatter about the need to prove the concept of value arises only from complete ignorance both of the subject under discussion and of the method of science. Every child knows that any nation that stopped working, not for a year, but let us say, just for a few weeks, would perish'.²³ Stopping the labour process is one thing and involves stopping the production of use values, but determining the value of commodities is quite a different thing.

A view is frequently attributed to Ricardo which he decidedly did not hold, but which Marx did hold. For example, Mary Morgan recently wrote with regard to Ricardo: 'it is *labour alone that creates value*, and ... there is a direct relationship between labour input and value'.²⁴ As I noted already, Ricardo did not have this opinion. However, unable to solve the problem of value and distribution to his own satisfaction, he embraced what he considered a close enough approximation to the truth: the 'labour embodiment hypothesis' (see in this regard Ricardo's rough draft and unfinished manuscript on 'Absolute Value and Exchangeable Value', written in 1823 shortly before he passed away).²⁵

In what respect can Marx be said to have improved upon the theory of value and distribution as Ricardo left it? In assessing Marx's achievements, we may refer to one of his most meticulous critical readers, Piero Sraffa. When Sraffa had doubts about certain propositions contained in Engels's edition of Volumes II and III of *Capital*, he even went to the archive in Amsterdam to view Marx's manuscripts, and find out what the situation was.²⁶ According to Sraffa, Marx's most remarkable and closely related achievements were the following:

- (1) Marx's representation of a given system of production in terms of his schemes of reproduction shared the same outlook as the circular flow

23 *MECW*, vol. 43, p. 68.

24 Morgan 2012, p. 60; emphasis added.

25 Ricardo 1951, p. IV.

26 He did so when he came across obvious contradictions concerning the law of the falling tendency of the rate of profits in Volume III of *Capital*. He anticipated the finding, confirmed in the *MEGA*² edition, that Engels had not limited his role as editor just to selecting material from Marx's unpublished papers – correcting typos and the like – but in a number of places actually changed the intended meaning of Marx's argument, or reformulated it in ways which Marx might not have approved of. See the evidence laid out in *MEGA*², II/4.2. For Sraffa's view on Ricardo and Marx, see Gehrke and Kurz 2006 and Kurz 2010a.

approach of the Physiocrats: commodities are produced *by means of commodities*. They do not result at the end of a production process of finite duration in which, starting with ‘unassisted labour,’ sequences of labour inputs lead, via some intermediate products, to some final products.

- (2) As a corollary, Marx’s concept of ‘constant capital’ expresses the *circularity* of production – the reason why Sraffa defended this concept against Ladislaus von Bortkiewicz. Starting from Vladimir K. Dmitriev’s ‘Austrian’ representation of production as a linear flow of finite duration, Bortkiewicz had maintained that the concept of constant capital was unimportant, and could be dispensed with. Sraffa disagreed strongly.
- (3) In terms of his labour value-based approach, Marx was able, however imperfectly, to see through the complexities of the system under consideration, and establish the fact that the rate of profits was bounded from above. In Marx’s conceptualisation, the maximum rate of profits – which obtained when wages were hypothetically taken to be nil – was equal to L/c , that is, the ratio of total living labour expended during a year ($L = v + s$) and social constant capital (c). It was therefore equal to the inverse of the organic composition of capital of the system as a whole. Sraffa must have been especially flabbergasted when he found out that Marx – in terms of what Sraffa called Marx’s ‘Value Hypothesis’ – had presupposed a fact which he, Sraffa, had sought to establish with a statistical ‘Hypothesis’: both hypotheses implied that the ratio of social capital to social product was independent of the rate of profits. The independence mentioned could, however, not be established with respect to any real system, but only with respect to an artificial system constructed from a real one, and by looking at the real system from the point of view of the artificial one. Sraffa succeeded in doing this by using what he called a ‘Standard system’, or a ‘Standard commodity’ as a particular measure of value, which, as he emphasised, gives ‘transparency to a system and render[s] visible what was hidden’, without altering its ‘mathematical properties’.²⁷
- (4) Since the capital-output ratio of the Standard system does not depend on the way in which the product is shared out between wages and profits, Marx’s earlier labour value-based construction can be said to have paved the way for the analytical establishment of an inverse relationship between the *rate* of profits and proportional wages (that is, the share of wages) in a circular flow system.

27 Sraffa 1960, p. 23.

5 Concluding Remark

Vollgraf raises the question: what remains of Marx? This question, I guess, cannot be answered independently of what Marxist scholars will actually do with his work in the future – whether they develop it, shed its weaknesses and elaborate on its strengths, or whether they enshrine the master and worship his words yet again. Marx, I believe, does not deserve to be treated like an icon. He was a relentless critic of untenable positions, no matter who held them, including his own mistakes. His self-critical attitude shows that he was a most serious scientist. His work contains deep insights into capitalism and its law of motion, which may serve as a platform from which to probe further into the fascinating world of economics, and develop tools and policies for a more just and equitable society.

The Development of Marx's Theory of the Falling Rate of Profit in the Four Drafts of *Capital*

Fred Moseley

The barrier to capitalist production is the surplus [labour] time of workers¹



Introduction

The most important conclusion of Marx's theory of capitalism is that the rate of profit would tend to decline over time as a result of technological change. Marx called his law of the tendency of the rate of profit to fall 'in every respect the most important law of modern political economy'.² In a letter to Engels, Marx claimed that this law was one of his most important achievements over classical economics.³

This paper reviews Marx's development of his theory of the falling rate of profit in the four drafts of *Capital*: the *Grundrisse*, the *Manuscript of 1861–3*, the *Manuscript of 1864–5*, and the published edition of Volume I. I will first present a brief introduction to the logical framework of Marx's theory to keep in mind as we review the manuscripts.

The main contributions of the *MEGA*² with respect to the falling rate of profit are Volumes 11/3.1, 11/3.5, and 11/4.2. The first two are parts of the *Manuscript of 1861–3* that were not published with the *Theories of Surplus-Value*, but were published for the first time in the *MEGA*² in 1976 and 1980, and whose English translations were published in Volumes 30 and 33 of the new *Marx-Engels Collected Works* in 1988 and 1991. Volume 3.1 presents a second draft of Marx's theory of surplus-value, significantly improved over the *Grundrisse* and very

¹ Marx 1981, p. 373.

² Marx 1973, p. 748.

³ Marx and Engels 1955, p. 194.

interesting (what later became Parts 2–4 of Volume I of *Capital*) (discussed in Section 2.1 below). Volume 3.5 includes a second draft of what later became Part One (Profit) and Part Three (Falling Rate of Profit) of Volume III of *Capital* (discussed in Sections 2.2 and 2.3 below). Volume 4.2 is the only full draft of Volume III of *Capital* which is in the *Manuscript of 1864–5* and which Engels edited and published as Volume III (discussed in Section 3 below). An English translation of this important volume has been completed and was recently published by Brill.⁴

The rate of profit⁵ (R) is defined as the ratio of the annual flow of surplus-value (s) to the stock of constant capital invested (c):⁶

$$(1) \quad R = s / c$$

We then divide both s and c by the annual flow of variable capital (v), because according to Marx's labour theory of value variable capital is the source of surplus-value (or more precisely the labour-power purchased with variable capital is the source of surplus-value), and we obtain:

$$(2) \quad R = (s/v) / (c/v)$$

Thus we can see that according to Marx's theory the rate of profit varies directly with the rate of surplus-value (s/v) and inversely with the composition of capital (c/v).⁷

Marx's theory of the falling rate of profit is focused on one key question: the effect of *technological change which increases the productivity of labour* (which Marx usually called 'the development of productive forces') on the rate

4 Marx 2016.

5 A longer introduction to Marx's theory of the falling rate of profit and the controversies surrounding this theory is in Moseley 1992, Chapter 1.

6 I simplify here by assuming that the stock of variable capital is equal to zero. In actual fact, the stock of variable capital is negligibly small, since workers are generally paid only after they have worked for some period of time and thus are paid out of value that they themselves have produced.

7 It should be noted that c , v , and s refer to quantities of *money capital*. Capital is defined by Marx in Chapter 4 of Volume I as $M - C - M + \Delta M$: money becoming more money. c and v are the two components of the initial money capital M (i.e. $M = c + v$) and s is the ΔM that emerges at the end of the circuit of money capital. Also these variables refer to productive capital only; see the conclusion below for a brief discussion of unproductive capital and its effect on the rate of profit.

of profit. Technological change is an inherent feature of capitalist economies, so if technological change causes the rate of profit to fall, that would be a very important conclusion – the falling rate of profit itself would be an inherent feature of capitalist economies due to the 'inner nature of capitalism'. Marx's theory is completely unique in this all-important respect. All other economic theories argue that technological change *increases* the rate of profit and thus is a factor that *offsets* a decline in the rate of profit caused by other factors (e.g. Ricardo and other classical economists, marginal productivity theory, Sraffa's theory, etc.).

Marx argued that *technological change would increase* both the composition of capital and the rate of surplus-value (Marx's arguments will be reviewed below). Since these two increases have opposite effects on the rate of profit, the net effect of technological change on the rate of profit depends on the relative rates of increase of the rate of surplus-value and the composition of capital. Marx argued further that the composition of capital would tend to increase faster than the rate of surplus-value, so that the rate of profit would tend to fall.

An alternative formulation is to divide s and c in equation (1) by the number of workers employed (L) for the same reason (workers are the source of surplus-value):

$$(3) \quad R = (s/L) / (c/L)$$

so that the numerator is in effect the *surplus-value produced per worker* and the denominator is the *constant capital invested per worker*. In this formulation, the rate of profit varies directly with the surplus-value per worker and inversely with the constant capital per worker, both of which will tend to increase as a result of technological change, so that the net effect on the rate of profit depends on the relative rates of increase of these two 'per worker' ratios. This formulation makes it easier to analyse relative rates of change over time.

The annual surplus-value produced per worker (s/L) can be decomposed into the average surplus-value produced per worker *per day* (s_d) and the average number of working days per year (D): $s = D (s_d)$. Thus the rate of profit can be expressed as:

$$(4) \quad R = (Ds_d/L) / (c/L)$$

s_d in turn depends on the number of hours of surplus labour in the working day. This formulation makes it possible to analyse (on the basis of the labour theory of value) the effect of technological change and increasing productivity on s_d and thus on s (holding D constant) and on the rate of profit.

Marx argued that technological change (with the real wage constant) increases the surplus-value per worker per day by reducing the necessary labour portion of the working day (the labour-time necessary to produce new-value equal to the money wage) and thereby increasing surplus labour (the excess of the working day over necessary labour). On the other hand, technological change also increases constant capital per worker for two reasons: both because of more expensive machines and equipment per worker and because more raw materials are processed per worker. These latter effects may be offset by increasing productivity in the industries that produce machines and raw materials (i.e. Marx's Department I), which 'cheapens' these means of production. However, Marx argued that there is an 'insurmountable limit' to the increase of surplus-value per worker per day, because surplus-value is produced by surplus labour, and surplus labour is limited by the number of hours in the working day. And there is no such limit to the increase of constant capital per worker. As a result, Marx concluded that the increase in constant capital per worker would tend to increase faster than the surplus-value per worker, so that the rate of profit would tend to fall. Marx's arguments for this conclusion will be examined below.

This singular focus of Marx's theory of the falling rate of profit on the effects of technological change means that the theory is at a high level of abstraction. Other factors that also affect the rate of profit – e.g. unproductive capital and labour, government policies, etc. – are all abstracted from in this theory. This abstract theory is complicated in itself (as we shall see) and is the basis for further extension to more concrete levels.

Marx's theory of the rate of profit also includes an explanation of how the rate of profit is *increased* during a crisis through the *devaluation of capital*, which makes possible a recovery from the crisis and another period of expansion. Since (according to Marx's theory) crises are caused by a falling rate of profit, a recovery from the crisis requires a restoration of the rate of profit. And since (according to Marx's theory) the falling rate of profit is caused by an increase in the composition of capital, a restoration of the rate of profit requires a reduction in the composition of capital, and this reduction is accomplished by the devaluation of the existing capital as a result of the crisis. Thus Marx's theory not only explains the fall in the rate of profit during expansions, but also the increase in the rate of profit during crises and depressions, which in turn is the basis for a theory of the alternating cycles of expansions and contractions in capitalist economies. Marx's theory is also unique in this respect; no other economic theory explains how the rate of profit is restored during depressions, thus making possible another expansion.

The following four sections will review Marx's writings on the falling rate of profit in each of the four of the drafts of *Capital*.

1 *Grundrisse*

There are three topics discussed in the *Grundrisse* that are relevant to the theory of the falling rate of profit, which will be discussed in turn: (1) diminishing effect of increasing productivity on surplus-value and the limit to increasing surplus labour; (2) classical economists' confusion of the rate of profit and the rate of surplus-value, and (3) the first draft of Marx's theory of the falling rate of profit, crises, and revolution.

1.1 *Diminishing Effect of Increasing Productivity on Surplus Labour and the Limit to Increasing Surplus Labour*

In Section I of the Chapter on Capital in the *Grundrisse*, soon after developing his theory of surplus-value for the first time and the key distinction between necessary labour and surplus labour, Marx wrote a very important 10-page subsection on 'surplus-value and productive force'.⁸ This subsection has to do with the effect of an increase of productivity on the relative magnitudes of the necessary labour (NL) and surplus labour (SL) portions of the working day; i.e. with what Marx later called 'relative surplus-value': an increase of productivity (with the real wage constant) reduces NL because it takes less time to produce a fixed amount of wage goods and the prices of wage goods and the money wage are reduced correspondingly. Therefore, it takes less time for workers to produce new-value equivalent to their (reduced) money wage. This reduction of NL in turn increases the SL portion of the working day in which surplus-value is produced. The main conclusion of this analysis, which Marx seems to be discovering for the first time while writing these pages, is that *the magnitude of the increase of SL depends on the initial division of the working day into NL and SL and that this effect diminishes over time as SL increases due to successive increases in productivity*. 'The larger the surplus value of capital *before the increase of productive force*, the larger the amount of presupposed surplus labour or surplus value of capital ... the *smaller is the increase of surplus-value* which capital obtains from the increase of productive force. Its surplus-value rises, but in an ever smaller relation to the development of the productive

8 Marx 1973, pp. 333–43. This title was added by the editors.

force'.⁹ The reason for this diminishing effect is that there are only a *limited number of hours in the working day*, and if SL is already most of the working day, then it gets harder and harder to increase SL still further.

Marx's method of analysis throughout this subsection is to assume an initial division of the working day into NL and SL, and then 'assume productivity doubles' (with the real wage constant) and analyse the effects on NL and SL. For example, if the initial division of the working day were $NL = \frac{1}{2}$ and $SL = \frac{1}{2}$, and if productivity doubled over some period of time, then the fraction of NL would be cut in half (e.g. reduced from $\frac{1}{2}$ to $\frac{1}{4}$) and the fraction of SL would increase from $\frac{1}{2}$ to $\frac{3}{4}$, i.e. a 50% increase. Then if productivity doubled again in the next period, the fraction of NL would again be cut in half from $\frac{1}{4}$ to $\frac{1}{8}$ and the fraction of SL would increase from $\frac{3}{4}$ to $\frac{7}{8}$, but this time the percentage increase is much smaller (17%).

Marx summarised as follows: 'The multiplier of the productive force is never the multiplier but always the divisor of the original relation ... If it were the former, then the multiplication of the productive force would correspond to the multiplication of the surplus value. Instead, the surplus value is always equal to the division of the original relation by the multiplier of the productive force'.¹⁰ We will see below that Marx repeated this argument in the *Manuscript of 1861–3* in a clearer form – in terms of the absolute magnitudes of necessary labour and surplus labour rather than as a fraction of the working day.

A little later in the manuscript, Marx referred back to this earlier discussion: '... as we have seen, relative surplus-value rises much more slowly than the force of production, and moreover *this proportion grows ever smaller* as the magnitude reached by the productive force is greater'.¹¹ This conclusion of a diminishing effect of increasing productivity on surplus-value is a straightforward logical deduction from the labour theory of value. According to the labour theory of value, a single worker in a given working day produces a *fixed amount of new-value*, independent of any changes in productivity and no matter how this fixed amount is divided into wages and surplus-value. Marx expressed this basic assumption clearly in the following passages from Volume I of *Capital*:

9 Marx 1973, p. 340. In all quotations, italicised emphasis is in the original; bold emphasis added.

10 Marx 1973, p. 336.

11 Marx 1973, p. 422.

The same labour, therefore, performed for the same length of time, always yields the same amount of value, independently of any variations in productivity.¹²

The value of money assumed to be constant, an average social working day of 12 hours always produces the same new value, 6s., no matter how this sum may be apportioned between surplus-value and wages. But if, as a result of an increase of productivity, there is a fall in the value of the means of subsistence, the daily value of labour-power is thereby reduced from 5s. to 3, the surplus-value will increase from 1s. to 3.¹³

Since a fixed amount of new-value is produced in a given working day, it gets harder and harder over time to increase the surplus labour portion of the working day and the surplus-value produced per worker.

This conclusion of the diminishing increase of surplus labour is obviously very important for Marx's theory of the falling rate of profit – it gets harder and harder to compensate for an increase in the constant capital per worker by increasing the surplus-value produced per worker. This key argument has not been given the attention it deserves in the long debate over the falling rate of profit. Rosdolsky is a notable exception; he emphasised Marx's discussion of this point in the *Grundrisse* in his Chapter 16 and in his Appendix to Part 5.¹⁴

1.2 *Classical Economists' Confusion between the Rate of Profit and Rate of Surplus-Value*

Toward the end of Section 1, there is a subsection with the title 'Confusion of surplus-value and profit' (added by the editors). This title is not entirely accurate, since this section is more about the confusion between the *rate* of surplus-value and the *rate* of profit. Of course, these two confusions are related, but we are more interested in the rate of profit. This is a subject that Marx discussed in all the later drafts of *Capital*, and he even seems to have become semi-obsessed with this subject in later years, writing some 250 pages of extremely detailed and tedious numerical examples in various manuscripts. As we shall see, this topic does not really have anything to do with Marx's theory

¹² Marx 1976, p. 137.

¹³ Marx 1976, p. 436.

¹⁴ Rosdolsky 1980. Perhaps part of the reason for the general lack of attention in the English literature is that Marx's discussion of this point in the *Manuscript of 1861–3* (to be discussed below) was published in English for the first time only in 1991, and readers did not realise the relevance of the discussion in the early part of the *Grundrisse* (published in 1973).

of the falling rate of profit, but rather has to do with the content of Engels's Part *One* of Volume III, not Engels's Part Three.

But there is in this section an important *critique* of the theory of the fall in the rate of profit presented independently by Harry Carry and Antoine Bastiat (whom Marx called the 'harmonists'). Carry and Bastiat argued that the cause of the decline in the rate of profit was an *increase in the wage share* of total income; i.e. a *decrease in the profit share* of income. The profit share is analogous to Marx's concept of the rate of surplus-value – both have to do with the division of the total income (i.e. the total value produced by workers) into wages and profit. Marx's critique of Carey and Bastiat was that they *confused the rate of profit and rate of surplus-value* and ignored the other determinant of the rate of profit – the ratio of constant capital to variable capital, which Marx later called the composition of capital. We will see below that Marx repeated his critique of this classical theory of rising wages a number of times in all the later drafts of *Capital*.

In this section, Marx also criticised 'Dr. Price's compound interest calculation', according to which profit could compound itself perpetually 'by some imaginary sleight of hand'.¹⁵ Marx argued that, since profit is due to surplus labour, the increase of profit has a definite limit – the length of the working day (echoing his earlier discussion of 'surplus-value and productive force').¹⁶

1.3 *First Draft of Marx's Theory of the Falling Rate of Profit, Crises and Revolution*

Section III of the Chapter on Capital in the *Grundrisse* is a first draft of what later became Part One (the transformation of surplus-value into profit and the rate of surplus-value into the rate of profit) and Part Three (the falling rate of profit) of Volume III of *Capital*, and is mostly about the latter. This discussion is not well organised, but Marx at least mentioned all the key elements of his theory of the falling rate of profit: the development of the productive forces leads to a relative decline in the part of capital exchanged for living labour, which causes the rate of profit to fall; the counter-tendencies of an increase in the surplus labour performed per worker and the cheapening of the means of production, which result from the *same process* of the development of productive forces; the limit to the increase of surplus labour (the working day); and the further devaluation of the existing capital during crises which restores

¹⁵ Marx 1973, p. 375.

¹⁶ In the *Manuscript of 1861–3*, Marx referred to compound interest as 'Price's fantasy' (MECW, vol. 32, p. 376), which 'left the fantasies of the alchemists far behind' (MECW, vol. 33, p. 222).

the rate of profit. This initial discussion also makes clear the significance of the falling rate of profit in Marx's overall thinking about the development and overthrow of capitalism.

First there is a statement of the general law: 'Presupposing the same surplus value, *the same surplus labour in proportion to necessary labour*, then the rate of profit depends on the relation between the part of capital exchanged for living labour and the part existing in the form of raw material and means of production. Hence, the smaller portion exchanged for labour becomes, the smaller becomes the rate of profit'.¹⁷ Marx called this 'the most important law in modern political economy', which 'despite its simplicity, has never been grasped'.¹⁸

A little later in this section, Marx presented a more complete summary of the effects of the development of the productive forces in capitalism, which includes an increase of surplus labour of workers:

The growth of the productive power of labour is *identical* with (a) the growth of the relative surplus value or of the relative surplus labour time which the worker gives to capital; (b) the decline of the labour time necessary for the reproduction of the labour capacity; (c) the decline of the part of capital which exchanges at all for living labour relative to the parts of it which participate in the production process as objectified labour and as presupposed value.¹⁹

Marx also mentioned briefly the counter-tendency that increasing productivity also cheapens the means of production and slows down (and perhaps even nullifies) the relative increase of constant capital. 'If the force of production increased simultaneously in the production of the different conditions of production, raw material, means of production and means of subsistence ... then their growth would bring about no change in the relation between the different component parts of the capital'.²⁰

In spite of these counter-tendencies, Marx seemed to be certain that the rate of profit would fall as a result of the development of productivity, and thus that the development of the productive forces in capitalism would come up against its *own internal limit*: 'Beyond a certain point, the development of the powers

17 Marx 1973, p. 747.

18 Marx 1973, p. 748.

19 Marx 1973, p. 763.

20 Marx 1973, p. 770; see also p. 773.

of production becomes a barrier for capital; hence the *capital relation a barrier for the development of the productive powers of labour*.²¹

Marx then linked his theory of the falling rate of profit with his general theory of history and revolutions (that he and Engels had developed in *The German Ideology* and that he would summarise the following year in the famous Preface to *A Contribution to the Critique of Political Economy*): when the productive forces of society come into conflict with its production relations, then there is a revolution to transform the production relations and 'unfetter' the further development of the productive forces.

When it has reached this point, capital ... enters into the same relation towards the development of social wealth and of the forces of production as the guild system, serfdom, slavery, and is necessarily stripped off as a fetter. The last form of servitude assumed by human activity ... is thereby cast off like a skin, and this casting off itself is the result of the mode of production corresponding to capital.

The growing incompatibility between the productive development of society and its hitherto existing relations of production expresses itself in bitter contradictions, crises, spasms. The *violent destruction of capital* not by relations external to it, but rather as a condition of its self-preservation, is the most striking form in which advice is given to it to be gone and to give room to a higher state of social production.

These contradictions, of course, lead to explosions, crises, in which ... by *annihilation of a great portion of capital* the latter is violently reduced to the point where it can go on ... Yet these regularly recurring catastrophes lead to their *repetition on a higher scale*, and finally to its *violent overthrow*.²²

Note that these passages also mention the 'destruction of capital' that occurs during crises, which restores the rate of profit and allows capitalism to 'go on', until the next crisis on a higher scale and eventually its overthrow.

Marx also mentioned in this paragraph the constant devaluation of the existing capital that occurs other than by crises (as a result of increasing productivity in the production of the means of production): 'There are moments in the developed movement of capital which delay this movement other than by crises; such as e.g. the constant devaluation of part of the existing capital

²¹ Marx 1973, p. 749.

²² Marx 1973, pp. 749–50.

...'.²³ Marx also repeated in this section his earlier critique of Carey and Bastiat (discussed above):

[Carey and Bastiat] accept the fact of the tendency of the rate of profit to fall in measure as productive capital grows. But they explain it simply and entirely as due to the growth in the value of labour's share ...²⁴

The harmonic Bastiat discovers, however, that, with the accumulation of capital, wages rise proportionally and absolutely. He assumes what he has to prove, that the decline of the profit rate is identical with the increase in the rate of wages ...²⁵

In his critique, Marx emphasised again that the rate of profit depends not only on the relation between surplus labour and necessary labour, but also on the relation of the total labour to the total capital (the inverse of the composition of capital).

The rate of profit is determined, then, not only by the relation of surplus labour to necessary labour ... but by overall relation of living labour employed to objective labour.²⁶

The rate of surplus value is determined simply by the relation of surplus labour to necessary labour; the rate of profit is determined not only by the relation of surplus to necessary labour, but by the relation of that part of capital exchanged for living labour to the total capital entering into production.²⁷

In summary, Marx seems to have had a fairly clear idea as early as the *Grundrisse* of all the elements of his theory of the falling rate of profit: the development of productive forces causes the composition of capital to increase, which causes the rate of profit to fall, although there are counter-tendencies that delay this fall: an increase in surplus labour per worker and the cheapening of the means of production, both of which result from the same process of the development

23 Marx 1973, p. 750.

24 Marx 1973, p. 754.

25 Marx 1973, pp. 756–7.

26 Marx 1973, p. 764.

27 Marx 1973, p. 767.

of productivity; the limit to the increase of surplus labour (the length of the working day), and the further devaluation of the existing capital during crises. Marx seemed to think that the falling rate of profit would lead to recurring crises and eventually to the overthrow of capitalism. Marx was also sharply critical of the classical theory that the falling rate of profit was caused by rising wages.

2 *Manuscript of 1861–3*

There are four parts of the *Manuscript of 1861–3* in which Marx discussed the theory of the falling rate of profit or issues related to it: (1) another discussion of the diminishing effect of increasing productivity on surplus labour and the limit to increasing surplus labour; (2) a first draft of what later became Chapter 5 of Volume III on the ‘cheapening of constant capital’; (3) a second draft of the theory of the falling rate of profit (although still not very complete); and (4) a more complete discussion of the counter-tendency of the cheapening of the means of production in the section of the *Theories of Surplus-Value* on Cherbuliez.

2.1 *Diminishing Effect of Increasing Productivity on Surplus Labour and the Limit to Increasing Surplus Labour*

The *Manuscript of 1861–3* begins with a second draft of Marx’s theory of surplus-value (what became Parts 2–4 of Volume I of *Capital*). In the section on relative surplus-value, Marx discussed again the diminishing effect of increasing productivity on surplus labour and hence surplus-value. The method of analysis is the same as in the *Grundrisse* (assume an initial division of the working day and then assume a doubling of productivity), but Marx’s argument in this manuscript is in terms of the absolute magnitudes of necessary labour and surplus labour rather than as fractions of the working day (which is clearer). Marx started with an initial division of a 12-hour working day into $NL = 10$ hours and $SL = 2$ hours. Marx then assumed a doubling of productivity (with a constant real wage) which reduces NL to 5 hours and increases surplus labour to 7 hours; a 250% increase. Then Marx assumed another doubling of productivity which reduces NL to $2\frac{1}{2}$ hours and increases SL to $9\frac{1}{2}$ hours; a much smaller 35% increase. Marx concluded:

Therefore, (and this must be dealt with in more detail under *profit*) the more advanced the industry, the smaller the proportional growth of surplus value, if productive power continues to increase *in the same degree*

... In other words, the *proportion* in which an increase in the productive power of labour reduces necessary labour time ... and raises surplus labour, hence surplus value, stands in an *inverse relation* to the proportion in which necessary labour time and surplus labour time [were] originally ...²⁸

Notice the parenthetical remark that this subject 'must be dealt with in more detail under *profit*', which includes the falling rate of profit.

2.2 *Critique of Ricardo*

In the chapter on Ricardo's theory of profit, Marx criticised again Ricardo's explanation of falling profit due to rising wages which are in turn the result of declining productivity in agriculture, which increases the prices of wage goods, and he presented a concise summary of his own theory:

The rate of profit falls, although the rate of surplus value remains the same or rises, because the proportion of variable capital to constant capital decreases with the development of the productive power of labour. The rate of profit falls, not because labour becomes less productive, but because it becomes more productive. Not because the worker is less exploited, but because he is more exploited ... capitalist production is inseparable from falling relative value of labour.²⁹

2.3 *Hodgskin and Compound Interest*

In a very interesting discussion of the 'labour economist' Thomas Hodgskin (author of *Labour Defended Against the Claims of Capital*), Marx argued that Hodgskin's theory of the falling rate of profit was actually similar to his own theory – capital increasing faster than labour and a limit to the profit that can be produced by each worker – although Hodgskin expressed his theory in terms of the impossibility of compound interest.³⁰ Hodgskin assumed a crude version of the labour theory of value according to which profit is produced by the labour of workers and he argued that, because of compound interest, capital would increase much faster than the number of workers. However, it would not be possible for each worker to produce enough extra profit to keep up with the rapid increase of capital. Therefore, the rate of profit would

28 MECW, vol. 30, p. 247.

29 MECW, vol. 32, p. 73.

30 MECW, vol. 32, pp. 431–49.

fall. Marx compared his own theory of the falling rate of profit to Hodgskin's theory as follows:

I have explained the decline in the rate of profit in spite of the fact that the rate of surplus value remains the same or even rises, by the decrease of the variable capital in relation to the constant ... Hodgskin ... explains it by the fact that it is impossible for the worker to fulfill the demands of capital which accumulates like compound interest ... It is general sense, this amounts to the same thing.³¹

It is a tribute to Hodgskin that he was able to intuit the falling rate of profit from the labour theory of value and its corollary of the limit to the amount of profit that each worker can produce.

In these pages, Marx expressed the limit of offsetting fewer workers with more surplus labour per workers as follows:

It is physically impossible that the surplus labour time of, say, 2 men who displace 20, can, by any conceivable increase of the absolute or relative labour time, equal that of the 20. If each of the 20 men only work 2 hours of surplus labour a day, the total will be 40 hours of surplus labour, whereas the total life span of the 2 men amounts only to 48 hours a day.³²

2.4 *Cheapening of Constant Capital ('Costs of Production')*

About two-thirds of the way through the *Manuscript of 1861–3*, Marx broke off from a section on mercantile capital (which was itself a break from the *Theories of Surplus-Value*) and started a new notebook which he called 'Third Chapter. Capital and Profit'.³³ This third chapter was the second draft of Section III of the Chapter on Capital in the *Grundrisse*, which as we saw above, was about two main subjects: (1) the transformation of surplus-value into profit and the rate of surplus-value into the rate of profit, and (2) the falling rate of profit. Section 6 of this third chapter in this manuscript introduces a new topic: 'costs of production' (which Marx later called 'cost price'), which is relevant to the falling rate of profit because it includes a discussion of the cheapening of constant capital and the effect of this cheapening on the rate of profit.³⁴

³¹ *MECW*, vol. 32, pp. 434–5.

³² *MECW*, vol. 32, p. 433.

³³ *MECW*, vol. 33, pp. 67–146.

³⁴ *MECW*, vol. 33, pp. 78–103.

Early in this section, Marx stated that, with the amount of surplus-value given, the rate of profit could be increased by a *reduction in the constant capital* invested in means of production. He cites the example of the cotton gin, which greatly reduced the price of raw cotton and hence made cotton textile manufacturing much more profitable. In general, the means of production (both raw materials and buildings and equipment) become cheaper due to increasing productivity in the industries that produce the means of production.³⁵ And this cheapening of new means of production also leads to the devaluation of the existing fixed capital. 'In reality, the part of capital which exists as fixed capital ... is *relatively devalued* by this increase in productive power or the relative devaluation of this capital'.³⁶

Marx also mentioned the economies of scale that makes buildings, heating and lighting and especially sources of motive power relatively cheaper compared to the number of workers employed. 'A second kind of increase in the rate of profit arises from another source, not from *economy in the labour* which produces constant capital, but from *economy in the employment of constant capital* ... The same factory buildings, heating, lighting, etc. cost less, relatively speaking, when employed on a large than when employed on a small scale of production'.³⁷

2.5 *Second Draft of the Theory of the Falling Rate of Profit*

Section 7 of the 'Third Chapter' is given its title by the editors (there is no title in Marx's manuscript): 'General Law of the Fall in the Rate of Profit with the Progress of Capitalist Production'.³⁸ Marx commented again that the falling rate of profit 'is the most important law in political economy'.³⁹ He also mentioned the 'cries of woe of economists over the day of judgment' that the development of capitalism must ultimately bring about.⁴⁰ And he noted that some economists (e.g. Fullarton) had come to realise that crises are a 'necessary violent means for the cure of the plethora of capital and the restoration of a sound rate of profit'.⁴¹

35 MECW, vol. 33, p. 84.

36 MECW, vol. 33, p. 88.

37 MECW, vol. 33, p. 89.

38 MECW, vol. 33, p. 104. The editors' title is taken from the last sentence of Marx's first paragraph and perhaps from Marx's title of Chapter Three in the *Manuscript of 1864-5*, except that in both cases Marx included the key word 'tendency' or 'tendential' and the editors' title does not.

39 MECW, vol. 33, p. 104.

40 MECW, vol. 33, p. 105.

41 MECW, vol. 33, p. 105.

Marx then presented a summary statement of his theory, similar to that in the *Grundrisse*:

... the law of development of capitalist production (see Cherbuliez, etc.) consists precisely in the continuous decline of variable capital ... in relation to the constant component of capital ...

So when the ratio of variable capital to the total amount of capital alters, the rate of profit falls ... The tendency towards a fall in the general rate of profit therefore = the development of the productive powers of capital ...⁴²

The = sign in the last sentence is a strong statement which suggests a definite conclusion; elsewhere Marx said that the development of productivity in capitalism is *identical* with a fall in the rate of profit.⁴³ Note also that Marx mentioned Cherbuliez in connection with the key point of the relative decline of variable capital. A little later in this manuscript, Marx wrote a 35-page section on Cherbuliez which will be discussed below.

In the rest of Section 7, Marx presented a more detailed analysis of the effect of the development of productivity on the rate of profit, with a clear new formulation – that the development of productivity in capitalism has a *double manifestation*: (1) it increases the ratio of surplus labour to necessary labour and (2) it reduces the total labour in relation to the total capital invested.⁴⁴ These two manifestations have *opposite effects* on the rate of profit: (1) has a positive effect and (2) has a negative effect. Thus the ultimate effect of the development of productivity on the rate of profit depends on the relative magnitudes of these two intermediate and opposing effects of the development of the productive forces.

Marx's exposition in these pages is not well organised, but he makes the following points:⁴⁵

- (1) What is remarkable is the 'not so pronounced' fall in the rate of profit, which must be due to a large increase in the rate of surplus-value: 'If one considers the development of productive power and the relatively *not so pronounced fall in the rate of profit*, the exploitation of labour must have

⁴² MECW, vol. 33, pp. 106–7.

⁴³ E.g. in Marx 1973 (*Grundrisse*), p. 763 quoted above.

⁴⁴ MECW, vol. 33, pp. 108–9 and 123.

⁴⁵ This section of the manuscript is in bad shape and there are many ellipses (...) indicating missing text.

increased very much, and *what is remarkable is not the fall in the rate of profit but that it has not fallen to a greater degree*.⁴⁶

- (2) However, there is a *limit* to the increase of surplus labour per worker, which is the length of the working day. This key point is not made with the detailed analysis of the effect of 'doubling productivity', as in the *Grundrisse* and earlier in the *Manuscript of 1861–3*, but rather with an extreme (long-run?) comparison of 24 workers replaced by 2 workers: Marx argues that, even if the surplus labour of the 24 workers was only 1 hour, 2 workers could not possibly perform as much surplus labour as the 24 workers did previously (assuming a 12-hour working day).⁴⁷
- (3) Increasing productivity has a positive effect on surplus labour only if it occurs in industries that produce the workers' means of subsistence (directly or indirectly); increasing productivity in the production of luxury goods does not reduce necessary labour and increase surplus labour.⁴⁸
- (4) The magnitude of constant capital does not increase at the same rate as productivity, especially the fixed constant capital that can be used cooperatively on a large scale (e.g. buildings and power source).⁴⁹ Raw materials may also become cheaper due to the increase in productivity in agriculture and mining; although there are natural limits to increasing productivity in these primary industries that are not present in manufacturing.⁵⁰
- (5) If capital per worker increases (e.g. increases 3 times), then *surplus labour per worker must increase at this same rate* if the rate of profit is not to fall.⁵¹ In Marx's numerical example, he assumed that surplus labour to begin with was only 1 hour, so a tripling to 3 hours is certainly possible. However, once surplus labour is already 1/3 of the working day (still a pretty low level of development), then it would not be possible to triple surplus labour no matter how great the increased productivity. This result follows from the diminishing effect of increasing productivity on surplus labour and surplus-value, as discussed above.
- (6) Marx asserted that his conclusion that the rate of profit tends to fall is 'confirmed by the evidence'.⁵² But he did not identify specific evidence.

46 MECW, vol. 33, p. 111.

47 MECW, vol. 33, pp. 110–11, 123 and 143.

48 MECW, vol. 33, pp. 134–5.

49 MECW, vol. 33, p. 140.

50 MECW, vol. 33, pp. 131–5.

51 MECW, vol. 33, pp. 116–19.

52 MECW, vol. 33, p. 110.

- (7) Marx repeated again (as in the *Grundrisse*) that the development of productive forces is the historic mission of capitalism, but the falling rate of profit creates a barrier to the fulfilment of that mission; which implies that capitalism is a *historical* (not a natural or eternal) mode of production which will eventually be superseded by a higher mode of production.⁵³

2.6 *Cheapening of Constant Capital Again (Ramsay and Cherbuliez)*

Toward the end of the *Manuscript of 1861–3*, after Marx had returned to the ‘Theories of Surplus-Value’, he wrote back-to-back sections on George Ramsay and Antoine Cherbuliez. In both of these sections, Marx emphasised again that a cheapening of constant capital increases the rate of profit. In the section on Ramsay, Marx commented that a cheapening of constant capital also ‘releases’ a certain amount of capital, or ‘converts capital into revenue’. This release of capital appears as an increase in the amount of profit from current production, but this is an illusion. The rate of profit increases because constant capital in the denominator is reduced, but the amount of profit in the numerator remains the same.

In the section on Cherbuliez, Marx wrote a more detailed discussion of the cheapening of the means of production as a counter-tendency to the fall in the rate of profit. Marx began by emphasising the ‘inconvertible FACT’ that the development of capitalism results in an increase in the relative proportion of constant capital:

It is an *incontrovertible FACT* that, as capitalist production develops, the portion of capital invested in machinery and raw materials grows, and the portion laid out in wages declines. This is the only question with which both Ramsay and Cherbuliez are concerned. For us, however, the main thing is: does this FACT explain the decline of the rate of profit? (*A decline, incidentally, which is far smaller than it is said to be.*)⁵⁴

Note the parenthetical remark that the decline in the rate of profit is ‘far smaller than it is said to be.’

In the discussion that followed, Marx made the following points:

⁵³ *MECW*, vol. 33, p. 114.

⁵⁴ *MECW*, vol. 33, pp. 287–8. Capitalised words indicate that Marx wrote these words in English.

(1) If the productivity of labour in raw material industries (e.g. cotton) increases at the same rate as in manufacturing (yarn), then the constant capital invested in raw materials would not increase.⁵⁵ However, there are *natural organic limits* to the increase of productivity in agriculture and mining that are not present in manufacturing, so that the increase in productivity in these raw material industries will usually be slower than in manufacturing.⁵⁶

(2) Machinery also becomes cheaper due to increased productivity in the machine-building industries, but the constant capital invested in machinery still generally increases. What becomes cheaper are the individual parts of the machines, but small machines are replaced by bigger machines and by whole systems of machinery, which are generally more expensive. 'Each individual machine confronting the worker is in itself a colossal assembly of instruments which he formerly used singly (e.g. 1,800 spindles instead of one)'.⁵⁷ Economies of scale also reduce the fixed constant capital compared to labour.

Marx concludes that, in spite of these counter-acting causes, it is 'self-evident' that increasing productivity causes the relative value of machinery to increase: 'It is therefore *self-evident* or a *tautological proposition* that the increasing productivity of labour caused by machinery corresponds to increased value of the machinery relative to the amount of labour employed (consequently to the value of labour, the variable capital)'.⁵⁸

(3) And another summary statement that the cheapening of means of production 'checks but does not cancel' the relative increase of constant capital which causes the rate of profit to fall: 'The cheapening of raw materials, and of *matières instrumentals*, etc. CHECKS BUT DOES NOT CANCEL THE GROWING VALUE OF THIS PART OF CAPITAL. It checks it TO THE DEGREE TO WHICH IT brings about THE FALL in PROFIT. This rubbish is herewith disposed of'.⁵⁹ The last sentence seems to suggest that Marx considered this issue settled.

A few pages later, in a discussion of Cherbuliez's own theory of the rate of profit, Marx stated that Cherbuliez 'never called into question' the *fact* of a fall in the profit rate. The only question was 'how to explain this phenomenon'.

55 MECW, vol. 33, p. 288.

56 MECW, vol. 33, p. 291. This does not mean that productivity in agriculture *declines*, as in Ricardo and other classical economists, but rather that the *rate of increase is slower* than in manufacturing.

57 MECW, vol. 33, p. 289.

58 MECW, vol. 33, pp. 289–90.

59 MECW, vol. 33, pp. 291.

And Marx argued that Cherbuliez was not able to explain this all-important phenomenon because he did not have a clear enough understanding of the implications of the distinction between constant capital and variable capital for the rate of profit.⁶⁰

Marx's example in this section (and in much of his writings on this issue) is the cotton textile industry, in particular the spinning of raw cotton into yarn, one of the main industries in the British economy at the time. Over the previous century, this production process had undergone tremendous development of productivity and the ratio of constant capital to variable capital had in fact increased enormously. This industry must have been part of what Marx had in mind when referring to the 'facts'. An important question is the extent to which the cotton yarn industry in the nineteenth century was typical at that time, and even more important, was and is typical in the twentieth and twenty-first centuries.

In summary, the two main new developments in the *Manuscript of 1861–3* (compared to the *Grundrisse*) were the formulation of 'double manifestation' to analyse the contradictory effects of the development of productivity on the rate of profit and also much more discussion of the cheapening of constant capital. There are also the statements that the fall in the rate of profit is 'not so pronounced' and 'far smaller than it is said to be', thus suggesting a weaker conclusion than in the *Grundrisse*.

3 *Manuscript of 1864–5 – Volume III of Capital*

Engels converted Marx's chapters in the *Manuscript of 1864–5* into 'parts' and converted Marx's sections of chapters into chapters and created some chapters and sections of his own. Marx's Chapter Three (Engels's Part Three) with which we are primarily concerned had no sections at all. For the convenience of readers, I will refer in the discussion below mostly to Engels's parts, chapters, and sections (except where explicitly noted otherwise). I will also discuss two related chapters from Part One of Volume III: Chapter 5 ('Economy in the Use of Constant Capital') and Chapter 6 ('Fluctuations in the Price of Raw Material; Their Direct Effects on the Rate of Profit').

We saw above that Section III of the Chapter on Capital in the *Grundrisse* is about two main subjects: the relation between surplus-value and profit (and the relation between their rates) and the falling rate of profit. And we saw that

60 *MECW*, vol. 33, pp. 298–9.

in the second draft of this material in the *Manuscript of 1861–3* ('Third Chapter') Marx added a third subject: 'costs of production' and especially the cheapening of constant capital. In the *Manuscript of 1864–5*, this material is divided into two chapters: Chapter One (Engels's Part One) on surplus-value / profit and 'cost price' (Marx's new term for costs of production) and Chapter Three on the falling rate of profit (Engels's Part Three).

Chapter One of Marx's manuscript includes for the first time a long and (tediously) detailed analysis of the relation between the rate of profit and the rate of surplus-value – about 80 pages in Marx's manuscript, which Engels and Samuel Moore condensed into 20 pages, which became Chapter 3 of Engels's Volume III. However, this analysis is separate from Marx's theory of the falling rate of profit. As we have seen, Marx's theory of the falling rate of profit is mainly about the effects of technological change and increasing productivity of labour on the rate of surplus-value and composition of capital and ultimately the net effect on the rate of profit. On the other hand, Marx's analysis of the relation between the rate of profit and the rate of surplus-value in Chapter One of the *Manuscript of 1864–5* hardly mentions productivity. There is no discussion of the 'double manifestation' of the development of productivity. Nor is there a discussion of the diminishing effect of increasing productivity on the amount of surplus-value, nor of the 'cheapening of constant capital'. Marx's analysis in Chapter One is a purely logical analysis of many possible cases, with little consideration of the realism or likelihood of these seven cases.⁶¹

The main purpose of this analysis is to criticise the classical economists, especially Ricardo and the 'harmonists' (Carey and Bastiat), who confused the rate of profit and rate of surplus-value and tried to explain the decline in the rate of profit by an alleged decline in the rate of surplus-value (using different terms of course). Marx introduced this subject as follows (not included in Engels's Volume III): 'Differences between the laws of the rate of profit and the rate of surplus-value and the incorrect theories of Ricardo who is confused about the difference'.⁶² And Marx commented a little later in the manuscript:

61 Marx stated toward the end of this long tedious analysis: 'In the final version of this story, we shall therefore limit our consideration to *what reasonably may happen*. For the investigation itself, it is necessary to go into all these details, but they should definitely not be inflicted on the reader'. [Amen!] (*MEGA*² 11/4.2, p. 83; translated by Ben Fowkes). Engels described the investigation as 'purely mathematical' (in Marx 1981, p. 141).

62 *MEGA*², 11/4.2, p. 46; translated by Ben Fowkes.

As can be studied with the Ricardians etc., it is completely wrong-headed to seek directly to present the laws of the rate of profit as laws of the rate of surplus-value, or vice versa.⁶³

One can therefore see that the movement of the rate of profit can be very complicated and that its analysis is by no means as simple a matter as the political economists have so far imagined.⁶⁴

The main point of Marx's critique of the classical economists is the many possible combinations of the rate of profit and rate of surplus-value (rise, fall, remain unchanged) which shows that the two are obviously not identical. Marx expressed this main point as follows: 'This shows that the rate of profit may rise, fall or remain unchanged while *the rate of surplus-value rises*; that the rate of profit may rise, fall, or remain unchanged while *the rate of surplus-value falls*; and finally the rate of profit may rise and fall while *the rate of surplus-value remains unchanged*.'⁶⁵

This detailed analysis of the mathematical relations between the rate of profit and the rate of surplus-value does not discuss the 'contradictory effects' of technological change and increasing productivity on the composition of capital and the rate of surplus-value, as in Marx's theory of the falling rate of profit.

3.1 *Chapter 5: Cheapening of Constant Capital*

In Chapter 5, there is a long discussion of the cheapening of constant capital (longer than in the *Manuscript of 1861–3*; 30 pages as opposed to 10 pages). The same points are made, but more fully elaborated and with more examples. The main point as before is that constant capital becomes cheaper as a result of increasing productivity in industries that produce means of production. Thus, once again, the development of productivity both increases the mass of the means of production – which increases constant capital – and also reduces the unit prices of the means of production – which reduces constant capital. 'The increasing profit that a capitalist obtains through a fall in the cost of cotton and spinning machinery, for example, is the result of an

63 *MEGA*², II/4.2, p. 61; translated by Ben Fowkes.

64 *MEGA*², II/4.2, p. 62; translated by Ben Fowkes.

65 *MEGA*², II/4.2, p. 100; translated by Ben Fowkes. Engels presented a similar summary in Marx 1981, p. 161.

increase in labour productivity ... in the production of machines and cotton'.⁶⁶ Marx also emphasised again the economies of fixed constant capital that result from large-scale production:

A different form of increase in the profit rate arises not from economy in the labour by which constant capital is produced, but rather from economy in the employment of constant capital itself. By the concentration of workers and their cooperation on a large scale, constant capital is spared. The same buildings, heating and lighting equipment, etc. cost relatively less for production of a large scale than on a small scale. The same holds for power and working machinery.⁶⁷

3.2 Chapter 6: *Price of Raw Materials and the Rate of Profit*

Chapter 6 emphasises again that the rate of profit is significantly affected by the price of raw materials. 'Raw material, however, forms a major component of constant capital ... As long as other circumstances are equal, the rate of profit falls or rises in the opposite direction to the price of the raw material ... [We] put forward the general law that, with other things being equal, the rate of profit varies inversely with the value of the raw material'.⁶⁸ Marx noted that this is why capitalists are so interested in free trade, especially in raw materials (e.g. cotton and corn), because of the strong effect of the price of raw materials on the rate of profit.

The point most relevant to the falling rate of profit is that Marx also argued that, as a result of the development of productivity, the *price of raw materials generally increases as a proportion of the price of products* (and wages and the depreciation cost of fixed capital decrease as a proportion of the price of products), which is another manifestation of an increase in the composition of capital: 'In proportion therefore as the productivity of labour develops, the value of the raw material forms an ever-growing component of the value of the commodity produced'.⁶⁹ At the same time, Marx also acknowledged the counter-tendency of increasing productivity in the production of the raw materials themselves and the consequent cheapening of the raw materials: '... provided that the growth is not cancelled out by a corresponding decline

66 Marx 1981, p. 173.

67 Marx 1981, p. 175; elaborated in Section 3 of Chapter 5, 'Economy in the Generation and Transformation of Power and on Buildings'.

68 Marx 1981, pp. 201 and 206.

69 Marx 1981, pp. 203–4.

in the raw material's value arising from the increasing productivity of the labour applied in its own creation'.⁷⁰ In Section 2 of Chapter 6, Marx discussed again the 'release' of capital due to the cheapening of constant capital, or 'the conversion of capital into revenue', which appears to increase the amount of profit as well as the rate of profit, but this appearance is an illusion.

3.3 Chapter 13: *The Law Itself*⁷¹

Engels converted Chapter Three of Marx's *Manuscript of 1864–5* (which had no sections at all) into Part Three of Volume III of *Capital*, which was divided into three chapters (the well-known Chapters 13, 14, and 15), which will be discussed in turn below. This more transparent organisation obviously made Marx's chapter look more finished than it actually was. In Appendix II of this paper, I discuss other revisions made by Engels to Marx's Chapter Three besides dividing Marx's chapter into three chapters. I relegate this discussion to an appendix because I do not regard these other changes as significant.

Chapter 13 opens with a simple numerical example in which the composition increases from 0.5 to 4.0 (i.e. 8 times), the rate of surplus-value is constant, and the rate of profit falls from 67% to 20%. Marx then presented a kind of general summary of the theory as in the earlier manuscripts:

... this gradual growth in the constant capital, in relation to the variable, must necessarily result in a *gradual fall of the general rate of profit*, given that the rate of surplus-value, or the level of exploitation of labour by capital, remains the same. Moreover, it has been shown to be a *law of the capitalist mode of production* that its development does in fact involve a relative decline in the relation of variable capital to constant, and hence also to the total capital set in motion ... This progressive decline of the variable capital in relation to the constant capital ... is just another expression for the progressive development of the social productivity of labour, which is shown by the way that the growing use of machinery and fixed capital enables more raw and ancillary materials to be transformed into products in the same time by the same number of workers ... The hypothetical series we constructed at the opening of this chapter therefore expresses the actual tendency of capitalist production. With the progressive decline in the variable capital in relation to the constant capital, this tendency leads to a rising organic composition of the total capital, and

70 Marx 1981, p. 204.

71 This title is Engels's, as are the titles of Chapters 14 and 15 and the sections of Chapter 15.

the direct result of this is that the rate of surplus-value, with the level of exploitation of labour remaining the same, or even rising, is expressed by a steadily falling general rate of profit. (We shall show later why this fall does not manifest itself in such an absolute form, but rather more in the *tendency to a progressive fall*.) The progressive tendency for the general rate of profit to fall is thus simply *the expression, peculiar to the capitalist mode of production*, of the progressive development of the social productivity of labour. This ... proves that it is a *self-evident necessity*, deriving from the nature of the capitalist mode of production itself, that as it advances the general average rate of surplus-value must be expressed in a *falling general rate of profit*.⁷²

Thus we can see in this important passage that: (1) the 'gradual growth' of c/v is described as a 'law of the capitalist mode of production' and 'just another expression for the progressive development of the social productivity of labour' in capitalism; (2) the falling rate of profit is a 'self-evident necessity' that is 'derived from the nature of the capitalist mode of production'; (3) however, this law is not an 'absolute law', but rather a 'tendency'; (4) the hypothetical series at the beginning of the chapter (in which c/v increases 8 times and the rate of profit falls from 67% to 20%) 'expresses the actual tendency of capitalist production', which is a very strong conclusion.

Marx then remarked that classical economists generally agreed that the rate of profit had fallen in previous decades and their theories had revolved around trying to explain this all-important phenomenon. 'Simple as this law appears from the above arguments, not one of the previous writers on economics succeeded in discovering it, as we shall see later on. These economists *perceived the phenomenon*, but tortured themselves with their contradictory attempts to explain it. And given the importance that this law has for political economy, one might well say that it forms the mystery around whose solution *the whole of political economy* since Adam Smith revolves ...'⁷³

There is no discussion in Chapter 13 of complications and counter-tendencies; these are discussed in the following two chapters. Most of Chapter 13 is devoted to a critique of vulgar economics and other unnamed 'previous economists'. These economists sought consolation for the falling rate of profit by arguing that the *mass* of profit increases, and perhaps even used the increasing mass as evidence against a falling rate of profit. 'Previous economists, not

72 Marx 1981, pp. 318–19.

73 Marx 1981, p. 319.

knowing how to explain the law of the falling rate of profit, invoked the rising mass of profit ... as a kind of consolation, but this was also based on mere commonplaces and imagined possibilities'.⁷⁴

Marx argued that the increasing mass of profit does not contradict a falling rate of profit, but is the net effect when the magnitude of capital increases faster than the rate of profit declines. And the increasing mass of profit is also no consolation because the falling rate of profit eventually brings capital accumulation to a halt and with it the next crisis.

Some classical economists also argued that, with the development of productivity, prices fall and capitalists accept a smaller *profit per unit of output*, but they make up for this loss by producing a greater quantity of commodities, such that the total profit increases (in spite of the decline in the per unit profit) due to the *multiplication* of these two factors. Marx argued, to the contrary, that the direction of causation between the unit profit and total profit is the *opposite* of what these economists thought – first the total profit is determined and then the unit profit is determined by *division* (i.e. by dividing the total profit by the quantity of commodities produced). In a familiar critique, Marx argued that *everything appears upside down* [i.e. opposite direction of causation] in competition. Marx summarised his critique as follows:

Since everything presents a false appearance in competition, in fact an upside-down one, it is possible for the individual capitalist to imagine: 1) that he reduces his profit on the individual commodity by cutting its price, but makes a bigger profit on account of the greater quantity of commodities that he sells; 2) that he fixes the price of the individual commodity and then determines the price of the total product by *multiplication*, whereas the original process is one of *division* (see Book I, Chapter 12, pp. 433–34), and this multiplication comes in only second hand, and is correct only on the premise of that division.⁷⁵

74 Marx 1981, p. 330.

75 Marx 1981, p. 338. Marx's critique of unit prices in Chapter 13 is relevant to the differences between Marx's theory and Sraffa's theory. Sraffa's theory is also about the *unit price* of commodities. The total price of an industry or the economy as a whole is generally not considered in Sraffa's theory; but if it were considered, it would be determined by *multiplication* (unit price x quantity of commodities), similar to these classical economists. Marx's theory, on the other hand, is based on the *opposite logic* – first the total price for the economy as a whole is determined, then the total prices of individual industries (i.e. prices of production) are determined by the equalisation of profit rates across industries, and then the unit prices for each commodity are determined by *division* – i.e. by dividing

3.4 Chapter 14: Counteracting Factors

Marx began his discussion of counteracting factors that slow down the decline in the rate of profit with the following statement, which emphasises that the theoretical problem is not so much explaining why the rate of profit falls, but rather 'explaining why this fall is not greater or faster':

If we consider the enormous development of the productive powers of social labour over the last 30 years alone, compared with all earlier periods; and particularly if we consider the enormous mass of fixed capital involved in the overall process of social production quite apart from the machinery proper, then instead of the problem that occupied previous economists, the problem of explaining the fall in the profit rate, we have the opposite problem of *explaining why this fall is not greater or faster*. Counteracting influences must be at work, checking and cancelling the effect of the general law, and giving it simply the character of a tendency, which is why we have described the fall in the general rate of profit as a tendential fall.⁷⁶

Marx then discussed the following six counteracting factors: increasing rate of exploitation by means of a longer working day and increased intensity of labour, reduction of wages below the value of labour-power, *cheapening of the elements of constant capital*, a relative surplus population which makes cheap labour available for industries with a lower composition of capital (especially luxury goods), foreign trade which might reduce both constant capital and variable capital, and the increase of share capital, such as railroad companies, that receive a lower than average rate of profit.

The most important of these counter-tendencies is 'the cheapening of the elements of constant capital' (the other factors do not result from technological change and increasing productivity and thus belong to a lower level of abstraction). This discussion of 'cheapening' is brief (one page), but substantial. Marx began by referring back to his earlier discussion of this topic in Part 1 (discussed above): 'Everything is relevant here that has been said in Part One of this volume about the causes that raise the rate of profit while the rate of surplus-value remains constant, or at least raise it independently of the latter. In particular, therefore, that fact that, viewing the total capital as a

prices of production by the quantity of commodities produced in each industry. Marx also discussed this method of determination of unit prices by division in the 'Results' manuscript, Part 1, 'Commodities as Products of Capital'.

76 Marx 1981, p. 339.

whole, that *the value of the constant capital does not increase in the same proportion as its material volume*.⁷⁷

As we saw above, what was said in Part One (Chapter 5) was that the main cause of the cheapening of constant capital was the development of productivity in the industries that produce means of production and that another important cause was the economies of scale of fixed constant capital. Marx continued with the example of cotton: 'For example, the quantity of cotton that a single European spinning operative works up in a modern factory has grown to a most colossal extent in comparison with that which a European spinner used to process with a spinning-wheel. But the value of the cotton has not grown in the same proportion as its mass'.⁷⁸ And Marx added: 'It is the same with machines and other fixed capital'.⁷⁹

Marx then emphasised again that this counter-tendency is due to the 'same development' that produced the tendency:

In other words, the *same development* that raises the mass of the constant capital in comparison with variable *reduces the value of its elements*, as a result of the higher productivity of labour, and hence prevents the value of constant capital, even though this grows steadily, from growing in the same degree as its material volume, i.e., the material volume of the means of production that are set in motion by the same amount of labour-power. In certain cases, the mass of the constant capital elements may even increase while their total value remains the same or even falls.⁸⁰

The second paragraph in this section clarifies that it is not just the new means of production that have become cheaper; the means of production that already exist and are in use are also devalued to correspond to the new higher social average level of productivity and lower level of prices. 'And related to what has been said is the *devaluation of existing capital* (i.e. of its material elements) that goes hand in hand with the *development of industry*. This too is a factor that steadily operates to stay the fall in the rate of profit ... We see here once again that the *same factors* that produce the tendency of the rate of profit fall also moderate the realization of this tendency'.⁸¹

77 Marx 1981, pp. 342–3.

78 Marx 1981, p. 343.

79 Marx 1981, p. 343.

80 Marx 1981, p. 343.

81 Marx 1981, p. 343.

Later in this chapter, in the section on foreign trade, Marx emphasised again that the *same factors* that cause a fall in the rate of profit also slow down this fall:

We have shown in general, therefore, how the *same causes* that bring about a fall in the general rate of profit provoke counter-effects that inhibit this fall, delay it and in part even paralyze it. These *do not annul the law, but they weaken its effect*. If this were not the case, it would not be the fall in the general rate of profit that was incomprehensible, but rather the relative slowness of this fall. The *law operates therefore simply as a tendency, whose effect is decisive only under particular circumstances and over long periods*.⁸²

And on the next page, Marx repeated his critique of the classical economists that the rate of profit does not fall because of *falling* productivity and rising wages (as they assumed), but because of the effects of *increasing* productivity!

The tendential fall in the rate of profit is linked with a tendential rise in the rate of surplus-value, i.e. in the level of exploitation of labour. *Nothing is more absurd*, then, than to explain the fall in the rate of profit in terms of a rise in wage rates, even though this too may be an exceptional case ... The profit rate does not fall because labour becomes less productive, but rather because it becomes *more productive*. *The rise in the rate of surplus-value and the fall in the rate of profit are simply particular forms that express the growing productivity of labour in capitalist terms*.⁸³

This last sentence indicates once again the central role that 'growing productivity' plays in Marx's theory of the falling rate of profit.

3.5 Chapter 15: Development of the Law's Internal Contradictions

Chapter 15 contains further discussions of both of the main counter-tendencies that result from the development of productivity: an increase in the surplus labour per worker and the cheapening of the means of production.

Section 1 begins with the familiar critique of Ricardo – that he confused the rate of profit and rate of surplus-value and mistakenly tried to explain the falling rate of profit by rising wages and a declining rate of surplus-value.

82 Marx 1981, p. 346.

83 Marx 1981, p. 347.

'Ricardo, while claiming to be dealing with the rate of profit, actually deals only with the rate of surplus-value ...'⁸⁴ Section 1 also mentions again Ricardo's 'horror' at the falling rate of profit, because it means that capitalism comes up against a barrier to the development of the productive forces that has nothing to do with production per se, and which in turn implies that capitalism is an historical and transitory mode of production.

Thus economists like Ricardo, who take the capitalist mode of production as an absolute, feel here that this mode of production creates a barrier for itself ... The important thing in their horror at the falling rate of profit is the feeling that the capitalist mode of production comes up against a barrier to the development of the productive forces which has nothing to do with the production of wealth as such; but this characteristic barrier in fact testifies to the restrictiveness and the solely historical and transitory character of the capitalist mode of production ...⁸⁵

And Marx succinctly summarised this critique of Ricardo's theory of the falling rate of profit (and the classical economists in general), as he had done before: 'The rate of profit does **not** fall because the workers is *less exploited*, but rather because *less labour* is generally applied in relation to the capital invested'.⁸⁶

In *Section 2*, there is another discussion of the 'double manifestation' of increasing productivity: an increase in the surplus labour per worker and a decrease in the number of workers (for a given amount of capital). 'As far as the labour-power applied is concerned, the development of the productivity again takes a *double form* – firstly, there is an *increase of surplus-labour* ... secondly, there is a *decline in the total amount of labour-power* (number of workers) applied to set a given capital in motion'.⁸⁷

As discussed above, these two effects of increasing productivity in turn have opposite effects on the rate of profit:

84 Marx 1981, p. 349. Marx's repeated criticism of this view of the classical economists that the fall in the rate of profit was caused by rising wages should make it clear that the modern 'profit squeeze' interpretation of Marx's crisis theory is a misinterpretation. This misinterpretation is usually based on Section 1 of Chapter 25 of Volume 1 of *Capital*, which will be discussed below.

85 Marx 1981, p. 350.

86 Marx 1981, p. 354.

87 Marx 1981, p. 355.

The two movements not only go hand in hand; they mutually condition one another and are phenomena that express the same law. But they *affect the profit rate in opposite directions* ... Surplus-value, in its total amount, is determined firstly by its rate and secondly by the mass of labour that is applied by this rate at any one time ...

One of these factors, the rate of surplus-value, is rising; the other, the number of workers, is falling (relatively or absolutely). In so far as the *development of the productive forces* reduces the paid portion of labour applied, it increases the surplus-value by lifting its rate; but in so far as it reduces the total quantity of labour applied by a given capital, it reduces the number by which this rate of surplus-value has to be multiplied in order to arrive at its mass.⁸⁸

Marx argued again that reduction of the number of workers resulting from the development of the productive forces can be compensated for by an increase in the surplus labour per worker, but there is a *limit* to this compensation: the length of the working day, again using the example of 24 workers replaced by 2 workers:

Two workers working 12 hours a day could not supply the same surplus-value as 24 workers each working 2 hours, even if they were able to live on air ... In this connection, therefore, the compensation of the reduced number of workers by a rise in the level of exploitation of labour has certain limits that cannot be overstepped; this can certainly check the fall in the profit rate, but it cannot cancel it out.⁸⁹

Marx also discussed in this section the general contradiction in capitalism between the development of productive forces and the overriding goal of the maximum valorisation of the existing capital.

To express this contradiction in the most general terms, it consists in the fact that the capitalist mode of production tends towards an *absolute development of the productive forces* irrespective of value and the surplus-value this contains, and even irrespective of the social relations within which capitalist production takes place; while on the other hand *its purpose is to maintain the existing capital value and to valorize it to the utmost*

88 Marx 1981, pp. 355–6.

89 Marx 1981, p. 356.

extent possible ... The methods through which it attains this end involve a decline in the profit rate, the devaluation of the existing capital and the development of the productive forces at the cost of the productive forces already produced.⁹⁰

Which leads to the famous sentence: 'The *true barrier* to capitalist production is *capital itself*'.⁹¹

Section 3 of Chapter 15 presents Marx's most extensive discussion of the devaluation of capital during crises, and the role that this devaluation plays in the restoration of the rate of profit, which makes possible another period of capital accumulation.

Under all circumstances, however, the balance will be restored by capital's lying idle or even by its destruction, to a greater or lesser extent.⁹²

The devaluation of the elements of constant capital, moreover, itself involves a rise in the profit rate.⁹³

*And so we go round the whole circle again.*⁹⁴

However, this discussion of the devaluation of capital in Section 3 is very abstract and not very realistic. Marx assumed 'absolute overproduction' in the sense that an increase of capital would not lead to any increase of surplus-value, so that the rate of profit would fall. This fall would set off a competitive struggle among capitalists to determine who would suffer the losses. Eventually the devaluation of the capital of the losers in the competitive struggle would raise the rate of profit sufficiently to resume profitable capital accumulation again.

However, this is not the way the devaluation of capital usually happens in real crises. Instead, the devaluation of capital typically happens through *bankruptcies*, in which the means of production of the bankrupt companies are auctioned off at deeply discounted prices (or similarly when such desperation sales take place in order to avoid bankruptcy). From Marx's own detailed study of actual crises, he was certainly aware of this bankruptcy and devaluation process. Perhaps he did not discuss this more realistic process because

90 Marx 1981, pp. 357–8.

91 Marx 1981, p. 358.

92 Marx 1981, p. 362.

93 Marx 1981, p. 363.

94 Marx 1981, p. 364.

bankruptcies involve debt and credit (bankrupt companies are companies that cannot pay their debts), and debt-credit relations are not yet included in the theory in Part Three on the falling rate of profit. Debt-credit relations are first introduced in Part Five and even there at a high level of abstraction.

In Section 4 of Chapter 15 ('Supplementary Remarks'), Marx made the following familiar points related to this theory of the falling rate of profit: (1) productivity increases slower in agriculture than in industry because agriculture is 'tied up with natural conditions which are often less favorable as productivity rises ...';⁹⁵ (2) economies of scale of fixed capital; (3) the distinction between the increase of the stock of fixed capital and its negative effect on the rate of profit and the decline of the depreciation cost of fixed capital as a share of the price of individual commodities; (4) some industries during some periods experience little or no technological change and thus little or no increase in the composition of capital, and this is a reason why the rate of profit does not fall as fast as capital increases; and (5) the tremendous increase of productivity in capitalism reaches a limit in the surplus labour of workers: 'The *barrier to capitalist production reaches a limit is the surplus [labour] time of workers*.'⁹⁶

All in all, the main new developments in Marx's exposition in the *Manuscript of 1864–5* compared to the earlier manuscripts are the following: a longer discussion of the cheapening of constant capital and a related discussion of the effect of the price of raw materials on the rate of profit; more emphasis on counter-tendencies than before, and the new formulation that the law of the falling rate of profit is 'not absolute', but is 'only a tendency', which allows for the possibility that the rate of profit might not fall during some expansions;⁹⁷ a more extensive discussion of the devaluation of capital during crises, although this discussion is very abstract and not very realistic; and an extensive critique of the 'consolation' of the classical economists that, even though the rate of profit falls, the mass of profit increases. It is also notable that Marx did not mention in this final draft of his theory of the falling rate of profit (nor in the *Manuscript of 1861–3*) that the crises caused by the falling rate of profit would eventually lead to the 'violent overthrow' of capitalism, as he did in the *Grundrisse*.⁹⁸

95 Marx 1981, p. 369.

96 Marx 1981, p. 373.

97 Thomas and Reuten have emphasised Marx's shift from 'absolute law' to 'tendency' in his theory of the falling rate of profit (in Bellofiore, Starosta and Thomas (eds.) 2013).

98 Thomas and Reuten have also emphasised this absence of Marx's apocalyptic crisis vision in his later works (in Bellofiore, Starosta and Thomas (eds.) 2013).

4 *Capital* Volume I

There are two chapters in Volume I of *Capital* that are related to Marx's theory of the falling rate of profit and which should also be mentioned (besides of course the general theory of surplus-value and the distinction between necessary labour and surplus labour, which determines the numerator in the rate of profit): Chapter 11 on 'The Rate and Mass of Surplus-Value' and especially Chapter 25 on 'The General Law of Capitalist Accumulation'.

4.1 *Chapter 11: Limit to Increasing Surplus Labour*

In Chapter 11, Marx introduced a simple algebraic equation for the mass of surplus-value (s) produced by a given capital (and implicitly the total surplus-value produced by the total social capital) as determined by the rate of surplus-value per worker (s'), the variable capital per worker (v_i), and the number of workers employed (n):

$$s = s' v_i n$$

Marx used this equation to discuss 'three laws'. The first law is just this equation itself – that the total surplus-value produced depends on these factors. The second law is the most relevant to our subject – that a reduction in one of these factors could possibly be offset by an increase in one of the other factors, so that the total surplus-value could remain constant. In particular, a reduction in the number of workers employed could possibly be offset by an increase in the rate of surplus-value. Marx assumed in this chapter that technology and v_i remain constant (i.e. no relative surplus-value), so that the only way that surplus labour could be increased would be to increase the total length of the working day.⁹⁹ However, Marx argued, there is a limit beyond which this compensation would no longer be possible – the length of the working day. 'Nevertheless there are *limits*, which cannot be overcome, to the compensation for a decrease in the number of workers employed ... provided by a rise in the rate of surplus-value; i.e. *the length of the working day*.'¹⁰⁰

Marx then implicitly previewed the importance of this point for his theory of the falling rate of profit. In this theory, technology is no longer held constant and indeed the effect of technological change on the rate of profit is the main question of the theory; in this case surplus labour could be increased by

99 Inherent technological change and relative surplus-value are derived in Chapter 12.

100 Marx 1976, p. 419.

reducing v_i and necessary labour. But, as we have seen, this compensation for a reduction in the number of workers employed by increasing the surplus labour per worker in this relative way is also limited by the length of the prevailing working day. 'This self-evident second law is of importance for the explanation of many phenomena arising from the tendency of capital to reduce as much as possible the number of workers employed ... which stands in contradiction with its other tendency to produce the greatest possible mass of surplus-value'.¹⁰¹

4.2 Chapter 25: *The Increase of the Organic Composition of Capital*

In Chapter 25 of Volume I, Marx presented his theory of the tendency of the organic composition of capital to increase and the effects of this increase on 'the fate of the working class'. Marx did not discuss the rate of profit in this chapter, but this discussion of the organic composition of capital to increase is of course the main cause of the falling rate of profit, according to Marx's theory. Marx's concept of the *organic* composition of capital is defined as the ratio of constant capital to variable capital in the *restricted sense* that this ratio is affected *only by a change of technology and productivity*, ignoring other factors that also affect this ratio (e.g. most importantly the wage rate per worker). Thus the concept of the organic composition of capital serves to focus Marx's theory squarely on the effect of technological change *only* on the ratio of constant capital to variable capital.

Section 1 of Chapter 25 assumes constant technology and thus is not a presentation of Marx's own theory, but is instead (once again) primarily a critique of the classical economists (especially Adam Smith in this case) who tended to base their analyses of the effects of the accumulation of capital on employment and wages on this unrealistic assumption. The main point of Marx's critique is that even under these 'more favorable circumstances' for workers, there is a *limit to increasing wages* in capitalism: if wages increase too much, then profits would be reduced below normal levels, the accumulation of capital would slow down, and the demand for labour and wages would fall.

Section 1 is often cited as evidence that Marx had a 'profit squeeze' theory of crisis due to rising wages. But we can see that Section 1 does not in fact provide such evidence. This section assumes constant technology and Marx's theory of crisis is focused on technological *change* and the effects of technological change on the composition of capital and the rate of profit. We have seen above that Marx repeatedly criticised the classical economists (especially Ricardo and

101 Marx 1976, p. 420.

Carey and Bastiat) for their theory that the falling rate of profit was caused by rising wages ('nothing is more absurd').

Marx presented his theory of the increasing organic composition of capital in *Section 2* of Chapter 25, which assumes technological change. The logic is familiar, but it is expressed more formally in terms of the *technical* composition of capital, the *value* composition of capital, and the *organic* composition of capital. Marx argued first of all that increasing productivity of labour increases the technical composition of capital for two reasons: it increases the quantity of machinery and equipment per worker as a *condition* of increased productivity and it increases the quantity of raw materials as a *consequence* of increased productivity. 'But whether condition or consequence, the growing extent of the means of production, as compared to the labour-power incorporated into them, is an expression of the growing productivity of labour'.¹⁰²

Technological change also increases the value composition of capital (i.e. the organic composition of capital increases), but the increase in the value composition of capital is less than the increase in the technical composition of capital because of the cheapening of the means of production themselves. 'The reason is simple: with the increasing productivity of labour, the mass of the means of production consumed by labour increases, but their value in comparison with their mass diminishes ...'¹⁰³

Marx also argued again that this conclusion is confirmed by the empirical evidence. In this case, he provided a specific example:

This law of the progressive growth of the constant part of capital in comparison with the variable part is *confirmed at every step* (as already shown) by the *comparative analysis of the prices of commodities*, whether we compare different economic epochs or different nations in the same epoch. The relative magnitude of the part of the price which represented the value of the means of production, or the constant part of the capital, is in direct proportion to the progress of accumulation, whereas the relative magnitude of the other part of the price, which represents the variable part of the capital, or the payment for labour, is in inverse proportion to the progress of accumulation.¹⁰⁴

¹⁰² Marx 1976, p. 773.

¹⁰³ Marx 1976, p. 774.

¹⁰⁴ Marx 1976, pp. 773–4. The parenthetical remark 'as already shown' refers to a prior discussion in Chapter 8 of Volume 1, pp. 309–10.

Marx presented in this chapter two hypothetical series of the trend in the ratio of constant capital to variable capital, which suggest a strong increasing tendency.¹⁰⁵ In both cases, this ratio increased from 1:1 to 7:1. In connection with the former series, Marx again cited the cotton textile industry as an example of an increasing value composition of capital, but a much smaller increase than the technical composition of capital.

In the remaining sections of Chapter 25, Marx analysed the effect of the increase in the composition of capital on the 'fate of the working class', primarily on the demand for labour-power and employment, and also on wages. However, he did not combine the increasing composition of capital with the increasing rate of surplus-value (which also results from technological change and the development of productivity) in order to analyse the net effect of these two opposing increases on the rate of profit, because the rate of profit had not yet been introduced into the theory in Volume 1.

5 After *Capital* Volume 1

So far as I know, the only published writing by Marx in the last 15 years of his life on the subject of the falling rate of profit was in the well-known and very important letter to Engels of 30 April 1868, in which Marx summarised the contents of the seven chapters of Book III. The summary of Chapter Three is only five lines (the summary of Chapter One is two pages and the summary of Chapter Two is over a page), but it is interesting: '*The tendency of the rate of profit to fall as society progresses*. This follows from what has been said in Book I on the *changes in the composition of capital following the development of the social productive forces*. This is one of the greatest triumphs over the *ponas inorum* of all previous economics'.¹⁰⁶

Several points are worth noting: the conclusion of the falling rate of profit is called a *tendency*, not a *law*; on the other hand, the phrase 'as society progresses' seems to suggest a long-run tendency; the falling rate of profit is caused by the development of productive forces; and the self-congratulatory tone seems to harbour no doubts.

So far as I know, Marx never returned to this subject in his published writings after 1868. The two main possibilities would be the *Manuscript of 1867–8* and the *Manuscript of 1875*. However, as I understand the contents of these two

105 Marx 1976, pp. 774 and 781.

106 Marx and Engels 1955, p. 194.

manuscripts (from my meagre German), neither of them has any discussion of the falling rate of profit as a result of technological change as discussed above. (I would be glad to be corrected on this point if I am missing something.) Both manuscripts have long discussions of the logical relation between the rate of profit and the rate of surplus-value (i.e. the 'Part One topic' as discussed above), but this subject is separate from and less important than the theory of the falling rate of profit. I wish Marx would have spent less time on these mathematical possibilities and more time developing his theory of the falling rate of profit (in ways discussed below).

On a related topic, in the 1870s Marx wrote several drafts of Book II of *Capital*, and in Part 3 on the reproduction schemes, he discussed the *irregular replacement of fixed capital* as a cause of the periodic cycles in capitalism. In Section 11 of Chapter 20, on 'Replacement of Fixed Capital', Marx concluded: 'This example of fixed capital – in the context of reproduction on a constant scale – is a striking one. A disproportionate production of fixed and circulation capital is a factor much favored by the economists in their explanation of crises. It is something new to them that a disproportion of this kind can and must arise from the mere *maintenance* of the fixed capital ...'¹⁰⁷ Chapter 21 explores this cause of cycles further in the context of expanded reproduction. However, this explanation of cycles seems to be separate from and independent of the falling rate of profit due to technological change; at least Marx did not explicitly link the two (of course the rate of profit was not yet introduced into the theory in Book II).

6 Was Marx's Theory of the Falling Rate of Profit 'Finished'?

There are at least two meanings to 'finished' in this case: (1) ready for publication and (2) a complete theory, with no major unanswered questions and perhaps a definite prediction of a falling rate of profit. Marx's theory of the falling rate of profit as presented in his last draft in the *Manuscript of 1864–5* was not 'finished' in either of these two senses. However, it could have been made ready for publication without too much additional work. Marx was clear about all the elements in his theory and the logical relation between them. He just needed to write a better exposition, better organised and showing more clearly the logical development, step by step. In particular, there needed to be a better exposition regarding the limit to increasing surplus labour – a key part of the

¹⁰⁷ Marx 1981, p. 545.

theory – along the lines of his exposition in the *Grundrisse* and the *Manuscript of 1861–3* concerning the diminishing effect of increasing productivity on surplus labour and surplus-value.

Marx's theory was clearly superior to any other theory of the trend in the rate of profit at the time, and in this sense also was close to publication-ready. The main classical theory was that the falling rate of profit was caused by rising wages, but this theory ignored constant capital and also either ignored technological change or assumed that technological change would *increase* the rate of profit (because rising wages were usually explained by *declining* productivity in agriculture).

In my view, it is a pity that Marx did not write a small booklet on the falling rate of profit in the 1870s, which could have been done independently of the rest of Volume III (except the sections of Part One on the cheapening of constant capital and the price of raw materials, which could have been easily incorporated).¹⁰⁸

Was Marx's theory of the falling rate of profit 'finished' in the second sense of a complete theory? No, of course not. More work needed to be done on at least three major points in the abstract theory and the theory also needed to be extended to more concrete levels of abstraction. The remainder of this paper is a brief discussion of these – in my view – additional necessary tasks.

6.1 *Cheapening of the Means of Production*

Marx was clear that the rate of increase of constant capital per worker depends in large part on the relative rates of increase of productivity in primary industries (agriculture, mining, machine building) (Marx's Department I) and secondary industries that purchase and utilise these means of production (Department II). Marx asserted that there are 'natural limits' to increasing productivity in agriculture and mining, so that the rate of increase in these primary indus-

108 In this sense, it is unfortunate that Marx decided in December 1862 to expand the contents of Book III to include not only profit and the falling rate of profit (as in the *Grundrisse* and the *Manuscript of 1861–3*, as discussed above) but also the general subject of the *distribution* of surplus-value, i.e. the division of the total surplus-value into individual parts (equal rates of profit across industries, commercial profit, interest, and rent). Marx had made considerable progress in developing his theory of the distribution of surplus-value while working on the *Manuscript of 1861–3*, and he evidently decided that he wanted to include these new developments as well in Book III rather than wait for a later volume. However, this decision made it all the more difficult to finish the book.

tries would usually be slower than in manufacturing. But this general assertion is not quantified in any way. Indeed, these relative rates of increase of productivity in Marx's Department I and Marx's Department II depend on many contingent and mostly technological factors, which may change a great deal from period to period, so that it does not seem possible to make a definite prediction about these relative rates of increase with any degree of certainty. Marx seems to have realised this himself with his increased emphasis on 'cheapening' and his shift from 'law' to 'tendency'.

Obviously much more work remained to be done (and still largely remains to be done) on this important and complicated subject. For example, to what extent have synthetic substitutes for natural materials made material inputs cheaper? Have chemical fertilizers and off-shore drilling and fracking, etc. temporarily overcome the natural limits of increasing productivity in agriculture and oil and coal extraction (at the great expense, of course, of the destruction of the environment)? To what extent has the relative decline of manufacturing and rise of service industries reduced the significance of material inputs? The epoch-making innovation of computers in recent decades has greatly cheapened machinery, but it has also continued to replace labour with machines; what has been the net effect of computers on the overall composition of capital?

6.2 *Devaluation of Capital during Crises*

More in-depth and realistic analysis of the devaluation of capital during crises and the actual bankruptcy process was and still is needed. Marx studied intensively the economic crises of his time (1847, 1857, 1866), and I will be very interested to learn from Kenji Mori's conference paper how much Marx wrote about bankruptcies and the devaluation of capital in his crisis notebooks.

Most of the work that needs to be done on this subject is empirical in nature. For example: how much devaluation usually occurs in a bankruptcy auction? How much devaluation seems to be necessary to restore the rate of profit sufficiently to make possible another period of expansion? How much devaluation actually took place during the Great Depression? What are the laws governing bankruptcies in different countries and have these laws changed over time? An important innovation in US bankruptcy law in recent decades is 'Chapter 11' which allows bankrupt companies to continue to operate while they renegotiate their debts. What effect does Chapter 11 have on the devaluation of capital and the ability of capitalism to recover from crises without a serious depression?

6.3 *Turnover Time and the Rate of Profit*

A third subject that required (and still requires) further work is the *effect of turnover time on the rate of profit*. So far as I know, Marx never wrote about this subject in his economic manuscripts. In Part Two of Volume II, Marx discussed the related subject of the effect of turnover time on the magnitude of *advanced capital*, but he assumed only circulating capital. In the *Manuscript of 1864–5*, Marx wrote only the following long title for Section 6 of his Chapter One: 'The Influence of Changes in Circulation Time, its Shortening or Lengthening (and also changes in the means of communication connected with this) on the Rate of Profit'.¹⁰⁹ Engels relocated this subject to Chapter 4 of his Part One and wrote the short chapter himself. Engels discussed the 'revolution' in the means of transportation and communication in the previous 50 years, especially railroads, steamships, and telegraph, which greatly reduced the turnover time of circulating capital and thus had a positive effect on the rate of profit. In his numerical examples, Engels calculated the rate of profit on consumed capital only (circulating capital plus depreciation costs of fixed capital) rather than on the total advanced capital.

In Marx's important letter of 30 April 1868 (mentioned above) there are three short paragraphs in his summary of Chapter One in which Marx expressed the intention to examine the relation between the turnover time of capital and the rate of profit, i.e. to write the section for which he only had a title in the *Manuscript of 1864–5*. And Marx is clear that such an examination should include fixed capital as well as circulating capital: 'We next examine how variations in the *turnover* of capital (partly depending on the relation between the circulating and fixed portion of capital, partly on the number of turnovers of circulating capital in a year, etc.) modify the *rate of profit* while *the rate of surplus-value remains the same*'.¹¹⁰

So far as I can tell, Marx did not write about this subject in the *Manuscript of 1867–8* nor in the *Manuscript of 1875*. The *Manuscript of 1867–8* discusses turnover time, but the discussion seems to be about *differences in turnover time across industries* rather than *changes over time in the aggregate turnover time of the total capital*, which is relevant to the falling rate of profit. There is a 25-page section which appears to incorporate unequal turnover times across industries into his theory of prices of production (which looks very interesting and I can't

109 Perhaps the reason Marx did not write this chapter is that, when he wrote Chapter One in the *Manuscript of 1863–5*, he had not yet written Part Two of Volume II.

110 Marx and Engels 1955, p. 192.

wait for it to be translated),¹¹¹ but there does not seem to be a similar section on the effect of changes in the aggregate turnover time on the trend in the rate of profit.

Vollgraf and Roth describe Marx's studies in the 1870s, which included innovations in the means of transportation and communication, especially railroads, steamships, and telegraph.¹¹² We have already seen that Engels discussed these innovations in his Chapter 4 of Volume III and their effect on the turnover time of circulating capital and the rate of profit.

Obviously much more work needs to be done on this important subject, again mostly empirical. The most obvious task would be to derive estimates of changes in turnover time in the nineteenth and twentieth centuries (including both circulating capital and fixed capital) and perhaps derive hypotheses about the likely trend of turnover time in the future. Mandel emphasised the reduction of the turnover time of fixed capital in 'late capitalism' and its positive effect on the rate of profit.¹¹³ The most extensive and promising work along these lines has been done by Duncan Foley, who has presented a mathematical model that incorporates (indeed emphasises) turnover time as a key variable in Marx's theory of the rate of profit (his 'circuit of capital' model), which has been adopted by other authors.¹¹⁴

6.4 *Unproductive Capital and Labour*

As discussed above, Marx's theory of the falling rate of profit is at a high level of abstraction. Two more concrete aspects of capitalist economies that affect the rate of profit will be briefly discussed: unproductive capital/labour and government policies.

Marx's theory of the falling rate of profit is in terms of productive capital and productive labour only; it abstracts entirely from unproductive capital and labour (employed in circulation and supervisory activities). Therefore, Marx's theory of the rate of profit needed (and still needs) to be extended to include unproductive capital and labour. Anwar Shaikh, Ahmet Tonak, Simon Mohun, and myself and others have extended Marx's theory in this way. In addition to the 'Marxian rate of profit' on productive capital only, we have developed a theory of the 'conventional rate of profit' on the total capital

111 Marx, *MEGA*², 11/4.3, pp. 254–80.

112 Vollgraf and Roth 2003c, p. 444.

113 Mandel 1975, Chapters 7 and 8.

114 Foley 1986.

including unproductive capital. The conventional rate of profit depends not only on the rate of surplus-value and the composition of capital, but also on the ratio of unproductive capital to variable capital (u/v), and varies inversely with this ratio. I have argued that the ratio u/v tends to increase as a result of the same process of technological change that increases the composition of capital and the rate of surplus-value, because the rate of productivity increase in production processes tends to be greater than in circulation and supervisory activities,¹¹⁵ but I am now less sure that this is a general tendency. The ratio u/v also depends on a complex of other factors which should be studied more thoroughly.

According to this framework, the 50% decline in the conventional rate of profit in the US economy from 1950 to 1980 was caused both by an increase in the composition of capital and by an increase in the ratio u/v , with about equal contributions of each factor to the overall decline (the rate of surplus-value remained roughly constant).¹¹⁶ The partial recovery of the conventional rate of profit since 1980 (about two-thirds of the previous decline has been restored) has been due entirely to a very sharp increase in the rate of surplus-value (from approximately 2.0 to approximately 3.0; i.e. a roughly 50% increase), which has more than offset smaller increases in the composition of capital and the ratio u/v during this latter period.¹¹⁷ This significant increase in the rate of profit by an increased rate of surplus-value alone (without a significant devaluation of capital) is contrary to Marx's expectations; but perhaps Marx did not envision the doubling of the global labour force in recent decades due to rapid globalisation, which has greatly reduced the bargaining power of workers in developed countries (especially the US). Obviously, much more empirical work along these Marxian lines needs to be done, especially for other countries besides the US.

6.5 *Government Policies*

Marx's theory of the falling rate of profit assumes a 'pure' private capitalist economy without government intervention. Marx did not analyse the possible effects of government policies on the rate of profit. Marx's theory has been extended to include an analysis of Keynesian fiscal and monetary policies and their effect on the rate of profit most prominently by Paul Mattick in his

¹¹⁵ Moseley 1992, Chapter 5.

¹¹⁶ Moseley 1992, Chapter 4.

¹¹⁷ Paitaridis and Tsoulfidis 2012.

pioneering work *Marx and Keynes: The Limits of the Mixed Economy*. Mattick argued, on the basis of Marx's theory, that expansionary fiscal and monetary policies may provide a temporary boost to output and employment, but they do not provide a lasting recovery from depressions, precisely because they generally do not increase the rate of profit. Indeed, to the extent that government policies *succeed* in temporarily increasing demand and output, they inhibit bankruptcies and thus inhibit and delay the devaluation of capital that is necessary to fully restore the rate of profit and make possible a sustainable recovery. Again much more work needs to be done on this subject, especially regarding the new government policies enacted after the crisis of 2008 – bailouts of financial institutions and monetary quantitative easing. It seems to me that Mattick's analysis of Keynesian policies also applies to these new policies – to the extent that they inhibit bankruptcies and the devaluation of capital, they delay the necessary conditions for a lasting recovery from crises.

Conclusion: The Best Theory in the History of Economics of the Trend and Fluctuations in the Rate of Profit

We have seen above that Marx's theory does not provide a definite prediction that the composition of capital will always necessarily increase faster than the rate of surplus-value during a period of expansion and thus that the rate of profit will always necessarily fall. Marx's theory does provide a substantial argument for this conclusion, especially the limit to increasing surplus labour per worker, but it does not provide a definite prediction, because the rate of increase of constant capital per worker is too contingent on other (mostly technological) factors to predict with any degree of certainty.

Critics of Marx's theory (e.g. Mark Blaug) have argued that, because Marx's theory does not provide a definite prediction, it should be rejected. But this is not a valid inference. Although Marx's theory does not provide a definite prediction, it does provide the most substantial theory in the history of economics of the trend and fluctuations in the rate of profit, before or after Marx. In my view, a more appropriate scientific attitude toward Marx's theory of the falling rate of profit would be, not to reject this theory because it does not provide a definite prediction (since no other theory does), but to seek to further develop this rich and promising theory along the lines suggested above.

It seems to me that Marx's theory of the falling rate of profit is perhaps more relevant today than ever before. We appear to be entering a new era of intensive labour-saving technological change. 'Automation' is the buzzword everywhere:

computers, robotics, artificial intelligence, 3-D printing, etc. In a recent paper, three MIT and NYU economists argue that the main effect of new information and communications technology in recent decades has been the globalisation of production and the outsourcing of jobs to low-wage areas of the world; but the main effect of the next wave of technology will be automation – the outsourcing of jobs to robots.¹¹⁸ Another recent paper by an economist and information engineer from Oxford University concluded that 47 percent of the jobs in the US economy are at risk for automation.¹¹⁹

Also, we are reaching the limits of increasing the surplus labour portion of the working day, as Marx's theory predicts. Recent estimates of the rate of surplus-value in the US economy range from 2.6 (Mohun) to 3.2 (Paitaridis and Tsoulfidis), approximately doubling from 1.5 in the 1970s.¹²⁰ Thus, surplus labour today already occupies most of the working day in the US (and probably other developed economies); about 5–6 hours of an 8-hour working day. This sharp increase in the rate of surplus-value is the reason the rate of profit has increased since the 1970s and has recovered most of the prior decline of the rate of profit in the early postwar period. But now that surplus labour is already most of the working day, it will be much harder in the future to increase surplus labour and surplus-value per worker still further. There is not much necessary labour left to convert into surplus labour. 'The limit of capitalist production is the surplus [labour] time of workers'.

118 Brynjolfsson et al. 2014.

119 Frey and Osborne 2013.

120 Mohun 2006; Paitaridis and Tsoulfidis 2012.

Appendix 6.1: The Okishio Theorem Does Not Apply to Marx's Theory¹²¹

This Appendix will briefly discuss the Okishio Theorem, which is supposed to have *proved* that technological change alone (with the real wage constant) can *never* reduce the rate of profit, thereby contradicting Marx's theory. The only possible cause of a decline in the profit rate (according to the Okishio Theorem) is increasing real wages.

However, the Okishio Theorem is a theorem that assumes Sraffa's theory (or linear production theory in general), which is fundamentally different from Marx's theory. Therefore, the Okishio Theorem does not in fact apply to Marx's theory; it applies only to Sraffa's theory. The major difference between Marx's theory and Sraffa's theory, which explains the different conclusions regarding the effect of technological change on the rate of profit, is their assumption regarding *labour*. According to Sraffa's theory, *labour is only a cost*, so that labour-saving technological change that individual capitalists are willing to adopt will always reduce the cost for the economy as a whole, and therefore will never reduce the rate of profit. According to Marx's theory, on the other hand, labour is not only a cost, but is also a *producer of new value*. Therefore although technological change may reduce labour costs, it also reduces labour as a producer of value, and thus could cause the rate of profit to fall, depending on the overall effects of this technological change on the rate of surplus-value and the composition of capital for the economy as a whole, as discussed in this paper. In Sraffa's theory, there is no distinction between constant capital and variable capital (indeed these concepts are not used in Sraffa's theory); both are costs and that is all. In Marx's theory, on the other hand, constant capital and variable capital are both costs, but there is also the crucial distinction between them – that only variable capital leads to the production of new-value.

Therefore, the Okishio Theorem is irrelevant to Marx's theory of the falling rate of profit. Marx's theory comes to an entirely different conclusion concerning the effect of technological change on the rate of profit than does Sraffian theory.

121 See Moseley 1992 (Chapter 1, pp. 20–3) for a longer discussion of the Okishio Theorem.

Appendix 6.2: Engels's Changes to Chapter Three of Marx's *Manuscript of 1864–5*

We have seen above that Engels converted Marx's Chapter Three into his Part Three, which he divided into Chapters 13, 14, and 15 (the latter with four sections). Engels also added the titles of these chapters. This more explicit structure obviously makes the chapter look more organised and complete than it actually was, but it does not necessarily change its meaning or emphasis. This section will briefly discuss the main changes that Engels made to Marx's chapter with respect to content. The comparison between Marx's chapter and Engels's edited part is finally possible with the publication of Marx's original *Manuscript of 1864–5* in the MEGA, Volume II/4.2 (1992) (and an English translation soon to be published).

The most controversial issue is whether Engels placed more emphasis than Marx on a *long-run secular decline* in the rate of profit. In order to answer this controversial question, one must first try to determine what Marx himself thought about a long-run secular decline in the rate of profit. It seems quite certain that Marx was convinced that over capitalism's first century there had been a significant long-run decline in the rate of profit (although Marx also noted that the decline in the rate of profit had not been as great as might be expected given the significant increase in the composition of capital). We saw above that Marx said that the hypothetical series at the beginning of Chapter 13, which shows a reduction in the rate of profit by two-thirds, 'expresses the actual tendency of capitalist production'.¹²² And we saw that Marx commented several times that the classical economists themselves generally accepted the *fact* of a falling rate of profit (and were in 'horror' of it); the only question was how to *explain* this all-important phenomenon. Marx remarked that the 'whole of political economy' had revolved around this question.¹²³

Of course, the conviction that the rate of profit had fallen in the long-run in the past does not necessarily imply that Marx expected that the rate of profit would continue to fall in the long-run in the future, although that would seem to be the most reasonable conjecture. I think that Marx thought that his theory provided an explanation of the decline of the rate of profit that has occurred in the past and that it provided a reasonable prediction of the likely trend in the rate of profit in the future ('except for isolated cases'; see below).

¹²² Marx 1981, p. 319.

¹²³ Marx 1981, p. 319.

Geert Reuten has argued that Engels gave the misleading impression that Marx thought that the rate of profit would definitely fall in the long-run by adding the following decisive sentence in the middle of Marx's text (toward the end of Engels's Chapter 13), without marking it as an insertion:¹²⁴ 'In practice, however, *the rate of profit will fall in the long run*, as we have already seen.'¹²⁵ Based on the above, I would say that Marx probably would have agreed with this sentence.

Reuten quoted fragments of the following two sentences just before Engels's inserted sentence in which Marx stated that the rate of profit might not fall and might even increase (with the rest of Marx's sentences in brackets: 'Viewed abstractly, the rate of profit might remain the same [*despite a fall in the price of the individual commodity* as a result of increased productivity] ... The rate of profit could even rise if [a rise in the rate of surplus-value was coupled with a significant reduction in the value of the elements of constant capital and fixed capital in particular.'])¹²⁶

However, the paragraph in which these sentences are located is not about Marx's own theory, but is instead a critique of a version of classical economics (like most of Chapter 13) – in this case that the decline of the rate of profit was caused by a *decline in the price of individual commodities* (i.e. a decline in the unit price of commodities). As we have seen above, Marx argued, to the contrary, that the unit price of commodities is derived from the rate of profit (and the quantity of commodities produced), not the other way around. The sentences quoted by Reuten were intended to argue that there is no necessary correlation between unit prices and the rate of profit. *Even though unit prices fall, the rate of profit might not fall and might even increase.* These sentences are not a conclusion to Marx's own analysis, but rather an argument against this 'unit price' explanation of the falling rate of profit.

A few pages earlier, Marx stated a conclusion similar to Engels's sentence that the rate of profit will fall, with the caveat except for 'isolated cases': '... with the *exception of isolated cases* (e.g. when the productivity of labour cheapens all the elements of both constant and variable capital to the same extent) *the rate of profit will fall*, despite the higher rate of surplus-value'.¹²⁷ Perhaps Engels had this sentence in mind when he added his sentence six pages later.

There are also a few other changes that Engels made to Marx's Chapter Three that should also be mentioned. In the first place, Engels changed the

¹²⁴ Reuten 2004, pp. 171–2.

¹²⁵ Marx 1981, p. 367.

¹²⁶ Marx 1981, pp. 366–7.

¹²⁷ Marx 1981, p. 333.

title of Marx's chapter. Marx's title was 'The Law of the Tendential Fall in the General Rate of Profit *with the Progress of Capitalist Production*'. Engels left off the italicised phrase. This italicised phrase seems to suggest a long-run secular decline, so Engels's deletion of the phrase could be interpreted to mean that he wanted to *de-emphasise* the long-run secular decline.

Another change that Engels made was to relocate five pages from the middle of his Chapter 15 to the end of his Chapter 13 (pp. 332–8 in Engels's Volume III), and Engels also added two pages of his own in the middle of these pages (pp. 334–5), which are marked as an addition.¹²⁸ The relocation of these pages makes some sense, since these pages are primarily about an increase in the *mass* of profit in spite of a decrease in the *rate* of profit, and this subject is also discussed in the preceding pages in Chapter 13. Therefore, I think this relocation is consistent with Marx's intentions.

Engels also made a modification in the last paragraph of Section 1 of his Chapter 15. Marx stated in parentheses that the centralisation and concentration of capital would cause a 'shake' [*Klappen*] in capitalist production if there were not counteracting tendencies.¹²⁹ Engels removed the parentheses and changed the mild word *Klappen* to the stronger *Zusammenbruch* (collapse or breakdown).¹³⁰ Vollgraf and Jungnickel have argued that this one change encouraged the 'breakdown' theorists of the 2nd International (e.g. Kautsky).¹³¹

Overall, I would say that the changes made by Engels to Marx's manuscript Chapter Three were not very significant. The summary of the main points in Engels's Part Three presented in this paper apply equally as well to Marx's Chapter Three: the general nature of the law itself in Chapter 13 (as a result of the development of the productive forces in capitalism); the discussion of the counteracting factors (Engels's Chapter 14 is almost word for word with Marx's manuscript); the internal contradictions in Chapter 15 which affect the rate of profit in opposite ways; the limit to the increase of surplus labour; the law of the falling rate of profit as a *tendency*, in the sense that it does not necessarily happen in every period, but that in the long-run it would decline; the critique of the classical theory of rising wages (discussed in all three chapters); and the general contradiction between the development of the productive forces in capitalism and the overriding aim of valorisation. 'The *true barrier* to capitalist production is *capital itself*' is most definitely Marx's sentence.

128 The sentences quoted by Reuten discussed above are in these relocated pages.

129 *MEGA*² 11/4.2, p. 315.

130 Marx 1981, p. 355.

131 Vollgraf and Jungnickel 2002, p. 62.

Did Marx Relinquish His Concept of Capital's Historical Dynamic? A Comment on Fred Moseley

Timm Graßmann

In 1829 there were, in Manchester, 1,088 cotton spinners employed in 36 factories. In 1841 there were but 448, and they tended 53,353 more spindles than the 1,088 spinners did in 1829. If manual labor had increased in the same proportion as the productive force, the number of spinners ought to have risen to 1,848; improved machinery had, therefore, deprived 1,400 workers of employment.¹



The many showdowns about the profit rate reveal a remarkable variety of positions about its assumed – or denied – fall. At the centre of the recent theoretical debate is a fiercely contested issue: whether Marx was able to prove that the long-term growth of the organic composition (c/v) could not be compensated for by the growth in the rate of surplus value (s/v), resulting especially from an increase in the rate of relative surplus value.

One major contribution of Fred Moseley's paper is to demonstrate how Marx was aware of that problem, and how Marx even argued for a limit to the increase of the rate of surplus value as early as the *Grundrisse* and the *Manuscripts of 1861–3*. Here, Marx was eager to demonstrate that the ratios s/v and c/v move differently with regard to increasing productivity. The increase in the rate of relative surplus value is, Marx argues, not proportional to the increase of productivity, but gets slower and slower with each doubling of the productive forces, and will reach a ceiling at some point.²

Moreover, Moseley denies the existence of 'such limits to the increase of constant capital per worker', and it seems right that he does so. If productivity

1 Marx, 'On the Question of Free Trade' [1848], in *MECW*, vol. 6, p. 460.

2 See Samol 2013.

doubles, the same number of workers will most likely set in motion twice as much raw material; hence, for the *organic composition of capital* the sky is the limit. Moseley convincingly shows that Marx anticipated the different behaviour of these two rates in the face of increasing productivity.

Another issue that has lately been put forward is whether Marx, toward the end of his life, dropped the law of the falling profit rate.³ In response to this interpretation, I want to put Marx's analysis of a growing organic composition in the context of his writings. The interconnectedness of Marx's economic works suggests that Marx's argument on the tendency of the profit rate to fall also reflects his thinking in *Capital* Volume 1. Most of the recent discussions on the falling rate of profit stick to pure 'economics', and focus on the math, thereby somehow neglecting the 'social' implications, and hence forgetting that Marx did not consider himself a 'mere economist', but as being engaged in a critique of political economy, eager to develop a more comprehensive social science. By drawing attention to its French edition, especially the chapter on accumulation, I claim that the *tendency of the surplus population to rise* is another – often neglected – aspect of Marx's analysis of capital's historical dynamic.

The French Edition of *Capital* Volume 1

The 1872–5 French edition is more than simply a translation of the original. Marx himself edited the text, expanded sections, included more precise formulations, and added material that was not part of the 2nd German edition from 1872. As the last edition which Marx personally prepared for publication, the French edition 'possesses a scientific value independent of the original and ought to be consulted even by the readers familiar with the German language', and it was intended to serve as the textual basis for future editions.⁴ This French edition was nevertheless hardly integrated into the popular editions of *Capital*. Volume 23 of the Marx-Engels-Werke, for instance, presents the 4th German edition of 1890, which the popular English translation by Ben Fowkes likewise follows very closely. The 4th German edition from 1890 was edited by Engels, and is often treated as the definitive text of Volume 1, although it is actually

³ See Heinrich 2013a.

⁴ Marx, 'Avis au lecteur', in *MEGA*² 11/7, p. 690. All translations of the French edition of *Capital* Volume 1 by Jurriaan Bendien.

derived from various prior editions (and mainly the 2nd German edition of 1872). Engels included many of the alterations in the French edition, too. Yet there are also important variants in the 1872–5 French edition which he disregarded in his 4th German edition.

The index of textual differences between the French and the 2nd German edition⁵ locates many of the variants between these two, but not even all the key ones. As Kevin Anderson and Lucia Pradella have demonstrated, the French edition of *Capital* Volume I was edited by a somewhat less ‘Anglocentric’ Marx, who was increasingly concerned with the development of non-Western societies and colonial oppression.⁶ Furthermore, whole pages from the chapter on ‘The General Law of Capitalist Accumulation’ are left out in the 4th German edition. I aim to show how these passages – which are among the last ones Marx wrote on issues of political economy – can be helpful in understanding the late Marx’s theoretical development and political concerns.

One Fundamental Contradiction of the Capitalist Mode of Production

Writing to Engels a few months after the first publication of *Capital* Volume I, Marx himself drew a direct connection between Volume I and Volume III: ‘*The tendency of the rate of profit to fall as society progresses*. This already follows from what was developed in Book I on the *change in the composition of capital with the development of the social productive power*. This is one of the greatest triumphs over the *pons asini* of all previous political economy’.⁷

Already in *Grundrisse*, one main theme is the contradiction between value and ‘real wealth’ – that is to say between the capitalist form of wealth that depends on labour-time, and a form that doesn’t. This distinction is crucial for Marx’s theory of value, according to which value is only a historically specific form of wealth. Marx thought that capital’s historical dynamic moves towards the possibility of a negation of value. He argues that in the course of the expansion of capitalist production, and with the development of the productive forces, the value-form becomes more and more anachronistic;⁸

5 ‘Verzeichnis von Abweichungen der französischen Übersetzung von der deutschen Vorlage’, in *MEGA*² 11/7, pp. 768–933.

6 Anderson 1983; Clarke 1994, pp. 256–60, 264–6; Anderson 1998; Pradella 2011.

7 *MECW*, vol. 43, p. 24.

8 Postone 1993, pp. 25–6.

anachronistic with regard to both the potential of the system of production, but also to the conditions of the reproduction of the capitalist system.

One central dialectic in *Capital* Volume 1, which Marx himself called the 'turning point' of his critique, or 'the pivot on which a clear comprehension of political economy turns',⁹ is the twofold character of labour: the contradiction between concrete and abstract labour, which manifests itself in the contradiction of use value and value, and ultimately reflects the relationship between a capitalist economy and a possible association of free individuals. Writing to Engels on 24 August 1867, he affirmed that one of '[t]he best points in my book [is]: 1. (this is fundamental to *all* understanding of the FACTS) the *two-fold character of labour* according to whether it is expressed in use-value or exchange-value'.¹⁰

Marx conceptualised *Capital* as an 'artistic whole',¹¹ so, logically, the same contradictions already revealed at the stage of the commodity form should operate on different levels of abstraction. It is repeatedly mentioned by Marx that this contradiction is deepened and developed in the progress of capitalist production. In the chapter on 'Machinery and Modern Industry', he wrote in 1867: 'Hence, the application of machinery to the production of surplus value implies a contradiction which is immanent in it, since of the two factors of the surplus value created by a given amount of capital, one, the rate of surplus value, cannot be increased, except by diminishing the other, the number of workmen'.¹²

In the light of such passages in *Capital* Volume 1, it is obvious that Marx derived the tendency of the profit rate to fall from the twofold character of labour, that is to say, from the inverse developments of a growing mass of use values and its shrinking value per unit. The more advanced the productive forces, the greater the mass of material things being produced in a given working period, and the richer a society becomes. Yet, at the same time, the value of these things will be smaller. Since the development of the productive forces implies that a continuously greater mass of means of production is set in motion by a relatively decreasing number of workers, the share of unpaid labour must also decrease, given the limit of the production of surplus value. Growing social wealth is therefore expressed as shrinking capitalist value – another way to formulate the tendency of the profit rate to fall.

9 *MECW*, vol. 35, p. 51.

10 *MECW*, vol. 42, p. 407.

11 See Otani 2013.

12 *MECW*, vol. 35, p. 410.

The Tendency of the Progressive Decrease of the Relative Size of the Variable Capital

According to Marx, a rising organic composition causes two things in the long term: not only a tendential fall of the rate of profit, but also a growing proportion of the working population that finds itself unable to participate in waged employment. Already in the 1863–5 manuscript for *Capital* Volume III in the infamous chapter on the falling rate of profit, Marx stresses repeatedly that in times of over-accumulation, unemployed capital and unemployed workforce exist next to each other.¹³ He discusses the same problem in *Capital* Volume I in the chapter on ‘The General Law of Capitalist Accumulation’. A close reading of this chapter might be helpful, since it touches on many questions usually dealt with in the context of the tendency of the profit rate to fall.

Of course, this is where Marx tackles Malthusian theories of population, which naturalise poverty by regarding an eternal and natural mismatch between population growth and the production of the means of subsistence as the main reason for unemployment. In contrast, Marx wants to prove the function of unemployment as a means to depress wage-levels, resulting from the needs of capital accumulation. However, the accumulation chapter contains a passage which is consistent with Moseley’s observation that Marx changed his reasoning on the limits to the increase of surplus labour per worker, from examining the division of the working day in *Grundrisse* to comparing the long-run replacement of the labour force in the *Manuscripts of 1861–3*:

If it [the proportion of constant to variable capital] was originally say 1:1, it now becomes successively 2:1, 3:1, 4:1, 5:1, 7:1, &c., so that, as the capital increases, instead of $\frac{1}{2}$ of its total value, only $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, &c., is transformed into labour-power, and, on the other hand, $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{7}{8}$ into means of production. Since the demand for labour is determined not by the amount of capital as a whole, but by its variable constituent alone, that demand falls progressively with the increase of the total capital, instead of, as previously assumed, rising in proportion to it. It falls relatively to the magnitude of the total capital, and at an accelerated rate, as this magnitude increases.¹⁴

13 MEGA² II/4.2, pp. 325, 330.

14 MECW, vol. 35, p. 623.

The greater the application of technology and machinery in production, the lower the relative requirements for labour power. According to Marx, this tendency was anticipated already by David Ricardo und Simon de Sismondi.¹⁵ A part of the capital that used to be variable, and yielded surplus value, is turned progressively into constant capital, which cannot produce either value or surplus value. On top of that, Marx concludes a tendency toward the growth of a 'consolidated surplus population', caused by a rising gap between supply and demand for labour. He calls this increasing separation of the potential of creating wealth from the application of labour power the 'absolute general law of capitalist accumulation':

The greater the social wealth, the functioning capital, the extent and energy of its growth, and, therefore also the absolute mass of the proletariat and the productiveness of its labour, the greater is the industrial reserve army. The same causes which develop the expansive power of capital, develop also the labour power at its disposal. The relative mass of the industrial reserve army increases therefore with the potential energy of wealth. But the greater this reserve army in proportion to the active labour army, the greater is the mass of a consolidated surplus population, whose misery is in inverse ratio to its torment of labour. The more extensive, finally, the lazarus-layers of the working class, and the industrial reserve army, the greater is official pauperism. *This is the absolute general law of capitalist accumulation.*¹⁶

The Tendency of the Progressive Decrease of the Relative Size of the Variable Capital in the French Edition

So, the general law of capitalist accumulation deals with the continual devaluation of labour power in the long run. Just as with the falling rate of profit, there are also countervailing tendencies for an increasing surplus population, such as the emergence of new industrial sectors with high employment effects.¹⁷ However, in the French edition, Marx adds that 'this same progression becomes

15 *MECW*, vol. 20, p. 147.

16 *MECW*, vol. 35, p. 638.

17 See Endnotes and Aaron Benanav, 'Misery and Debt. On the Logic and History of Surplus Populations and Surplus Capital', in *Endnotes* no. 2, 2010. Its two main claims regarding Marx's *Capital* – that the accumulation chapter does not treat the population question only in relation to the business cycle but also to capital's historical dynamic, and that

the source of new technical changes that further reduce the relative demand for labor. Thus the game has begun'.¹⁸ New industries are most likely to be created, but 'all these industries in turn pass through a technical transformation that adapts them to the modern mode of production'.¹⁹ Productivity gains are thus generalised throughout all branches: 'perfections of details accumulated gradually become concentrated, as it were, under high pressure; they are embodied in technical changes which revolutionize the composition of capital across the whole perimeter of large spheres of production'.²⁰ As an example, he adds a reference to the American Civil War, and the disruption of the supply of cotton it caused (the so-called *Cotton Famine*), which forced English capitalists to introduce better machinery to make up for the loss of profit: 'this is how the American civil war pushed the English spinners to populate their workshops with more powerful machines and depopulate their workers'. Marx concludes with the observation that the times of boom beneficial for the demand for labour would progressively shorten: 'finally, the length of these intervals where the accumulation most favours the demand for labor gradually shorten'.²¹ To sum up: the continual relative decrease of variable capital vis-à-vis constant capital simultaneously reduces the relative demand for labour power, which makes an absolute increasing part of the working population superfluous, when productivity is spread throughout branches, and is not checked by the growth of another sector with high employment effects.

I agree with Moseley that there is no theory of 'profit squeeze' here. The rise in wages might trigger the crisis, but does not cause it; the reason is over-accumulation, making the system vulnerable.²² Crisis management requires the restoration of the profit rate through a devaluation of over-accumulated capital or an increase of surplus value. Labour is then made redundant, and therefore goes through a process of deflation.

Fred Moseley gives the example of the cotton industry, as the main industry of the nineteenth-century British economy. To what extent can the emergence

Marx gathered empirical evidence for the working of the 'general law' – are taken up and extended in the following.

18 *MEGA*² 11/7, p. 552.

19 *MEGA*² 11/7.

20 *MEGA*² 11/7, p. 553.

21 *MEGA*² 11/7. For Marx, the rapid increase of the organic composition in the cotton industry during the 1860s was a major cause for the crisis of 1866, which itself was set off by the failure of the largest London Bank (Overend, Gurney and Co). See *MECW*, vol. 35, pp. 436–8.

22 See Clarke 1994, p. 256.

of new industries make up for the loss of jobs? Marx presents statistics from the British census of 1861, showing the strong redundancy effect of the industries of the early second industrial revolution (beginning around 1860). Marx quotes the census: 'The increase of labourers is generally greatest, since 1851, in such branches of industry in which machinery has not up to the present been employed with success'.²³ In the chapter on the 'Theory of Compensation as Regards the Workpeople Displaced by Machinery' Marx already gave the examples of 'gas-works, telegraphs, photography, steam navigation, and railways', showing a weak effect on employment.²⁴ Marx registers that the total employment in these industries amounted to less than 100,000 workers, whereas over one million people worked in the textile and metal industries. Furthermore, an increase in productivity in the agricultural sector was just about to take place, through new forms of animal breeding, the application of fertilizers, increasing mechanisation and the development of new sciences like geology and chemistry.

Regarding the census of 1861, Marx makes another important observation, specifically to do with a sharp decline in employment of 4.5% in the agricultural sector within just 10 years. Marx does not seem to be fully aware of the consequences of his analysis at this point. Because the introduction of the commodity form and large-scale industrialisation in agriculture implies another pressure to decrease variable capital, and therefore depopulate rural areas – with traditional forms of peasant community being an alternate (however likely patriarchal and narrow-minded) mode of reproduction.

In the *Manuscripts 1861–3*, Marx already noted that productivity in industry had increased quicker than in agriculture, but that this disproportion was likely to disappear in the future, because of the centralisation of capital in agriculture and the development of sciences applicable in the agricultural sector, such as chemistry, geology and physiology.²⁵ This forecast has been totally fulfilled, as the 'demise of the peasantry' is one of the major developments of the twentieth century,²⁶ one that will finally have reached its end when China's urban population outgrows its rural one by the year 2020.

In the French edition, there is another footnote in which Marx combines numbers from the 1861 census and from a Statistical Abstract for the United Kingdom. This footnote was not included in any of the German editions. With

23 MECW, vol. 35, p. 625.

24 MECW, vol. 35, p. 449. See Bastani 2012.

25 MEGA² 11/3, p. 762.

26 Hobsbawm 1994, Chapter 10.

the help of these numbers, Marx demonstrates an increase by 70% in linen production in ten years – produced by just 4% more workers.²⁷ Thus, Marx did not simply deduce the *general law* from the twofold character of labour, but also demonstrated it empirically.²⁸ Despite the limited scope of Marx's English data, and the timeframe of 1846–66, his anticipation is plausible, since, until the appearance of Fordist industries, it had been questioned whether capitalism could be generalised to the level of the reproduction of the whole society. The era of Fordism marked at the same time a new peak of the production of relative surplus value – a strong countervailing tendency to a fall of the profit rate – because a massive cheapening of the means of subsistence lowered the value of labour power.

I argued that in the French edition of *Capital* Volume 1 the notion of the industrial reserve army has slightly changed from a cyclical, periodical phenomenon to a steady, permanent and durable one. Then, Marx goes on to investigate the business cycle, blaming the superficiality of political economy, which took the expansion and contraction of credit to be the sole cause of crisis, and arguing that this is a symptom, and not the cause of the cycle. The French edition adds to the cycle another passage, relating the emergence of the world market:

But this applies only to the time when the mechanical industry, having struck some pretty deep roots, exerts a preponderant influence on all the national production; where, thanks to that, foreign trade begins to overtake domestic trade; where the universal market successively annexes vast terrains in the New World, Asia and Australia; where, finally, the industrial nations entering into competition become quite numerous – only in this epoch do we find the recurring cycles whose successive phases embrace years and always culminate in a general crisis, at the end of one cycle and the starting point of another. So far, these cycles last for a period of ten or eleven years, but there is no reason to consider this length as being fixed. To the contrary, one should infer that according to the laws of capitalist production, such as we have to develop them, it is variable and the periodisation of cycles will be gradually shortened.²⁹

27 Marx, *MEGA*² 11/7, p. 553.

28 Endnotes and Aaron Benanav, 2010.

29 *MEGA*² 11/7 p. 557.

However, by referring to 'the laws of capitalist production', Marx links the business cycle and its periodical ups and downs to the general law and his theory of capitalism's historical development.³⁰ Not only would the boom phases, in which workers achieve higher wages, be shorter, but also the periods of the whole cycle. When Marx claims that beneficial periods of boom, and of the conjuncture more broadly, will progressively shorten, he even echoes the rhetoric of the *Communist Manifesto*, according to which solving commercial crises only paved the way for more extensive and more destructive ones.

Marx finally describes the (global and gendered) expansion of the workforce, caused by capital's search for a cheap workforce, that puts the Chinese weaver in competition with the English one. However, this drive for cheap labour is another mechanism to increase the surplus proletariat, since more and more people are getting formally subsumed by the labour market, even although, simultaneously, more and more people also become redundant:

Industrial progress, which follows the progress of accumulation, not only reduces more and more the number of workers required to operate a growing mass of means of production, it increases at the same time the amount of work that the individual worker must supply. In the measure that it develops the productive powers of labor, and therefore draws more products from less labor, the capitalist system is also developing ways to appropriate more work from the wage earners, either by extending their working hours, thereby making their labour more intense, or by apparently increasing the number of workers employed, by replacing a superior and more expensive workforce by several inferior and cheap workforces, the man by the woman, the adult by adolescents and children, a Yankee by three Chinese. These are all ways to reduce the demand for labor and make its supply superabundant, in a word, to fabricate redundant people.³¹

What Marx describes in the context of the general law of capitalist accumulation is not only the eternal cycle between boom and crash, with one crisis being as bad as the other, with devaluation simply as a rejuvenating effect that allows the game to start all over again. He recognises rather an inner limit to the capital-labour relation itself, a contraction of the system of abstract labour

30 Clarke 1994, p. 260.

31 *MEGA*² 11/7, p. 558.

beyond short-time cyclical fluctuations. The reproduction of the proletariat is tendentially becoming less and less possible under capital. Capital cannot utilise everyone, but nevertheless everyone is forced to find work. 'On the one hand, people in capitalist social relations are reduced to workers. On the other hand, they *cannot be workers* since, by working, they undermine the conditions of possibility of their own existence'.³²

To sum up, Marx provides three factors for the size of the surplus proletariat: 1) the degree of mechanisation and automation of industry (and not only the respective phase of the industrial cycle), *ergo* the organic composition, the number of workers employed per capital unit; 2) the extent of the destruction of pre-capitalist modes of production (primitive accumulation) and their integration into the world market; 3) the extent of the industrialisation of agriculture, and hence the absolute decrease of employment in the first sector. Just as with the falling rate of profit, there are also countervailing tendencies for a rising surplus population, such as the emergence of new industrial sectors with high employment effects (as happened in the Fordist era), agricultural subsidies and other forms of peasantry protection (what Marx discussed as the 'modern theory of colonisation'), and migration (e.g. the Irish surplus proletariat migrating to the United States).

Conclusion

The accumulation chapter of *Capital* Volume I does not only deal with the business cycle and the determination of the wage rate, but also contains Marx's analysis of the historical tendency of capitalist accumulation. The general law of capital accumulation expresses a tendency of decline, or at least a severe crisis of the capital-labour relation, about which, toward the end of his life, Marx seemed to be as convinced as before, which is indicated by the alternate passages from the French edition containing some of his last words on political economy, and that even deepen his analysis of capital's historical dynamic with regard to the surplus population problem.

We could speculate that the French edition reflected Marx's latest insights, including among many ideas an increasing scepticism – after the defeat of the Paris Commune in 1871 – about a unilinear path to communism arising from the revolutionary potential of the industrial proletariat in the traditional sense. So, he started to search again, this time more interested in non-Western soci-

32 Endnotes and Aaron Benanav, 2010.

eties, gender relations, ecological issues, but also no longer ignoring the revolutionary potential of the superabundant population which he had earlier referred to as a 'passive' lumpenproletariat. It is crucial to recognise that Marx's notion of the surplus population is far from being dismissive, which is echoed in the *Critique of the Gotha Programme* where Marx heavily criticises Lassalle's idea that all classes apart from the proletariat would form just a 'reactionary mass' and where he hints at an alliance with 'artisans, small manufacturers, etc., and *peasants*'.³³ Instead of subsuming the surplus proletariat to static categories such as 'the excluded', 'the lower classes', or 'the poor', or labelling it 'lumpenproletariat',³⁴ Marx considers different moments of the same social totality and its dynamic relations.³⁵ This is expressed in the definition of the proletariat Marx gave in *Capital*, which was added precisely in the 2nd German edition from 1872: 'Our "Proletarian" is economically none other than the wage labourer, who produces and increases capital, and is thrown out on the streets, as soon as he is superfluous for the needs of aggrandisement of "Monsieur Capital" ...'³⁶ To treat the proletariat as various moments of a continuum indicates that it is not identical with the industrial working class in the traditional sense.

Additionally, Marx also had to face a possibly new type of crisis emerging from the panic of 1873 (*Gründerkrach*), which triggered a hitherto unknown depression in Europe and North America lasting from 1873 until at least 1879. In Britain, it was known as the *long depression* (even lasting two decades), caused by the weakening dynamics of British industry,³⁷ expressed by reduced growth rates in the manufacturing sector,³⁸ and accompanied by a rapid financial expansion, of which the panic of May 1866 was the first indicator.

It is also in the French edition that Marx included three pages on the condition of rural agricultural laborers in Ireland (added to the 3rd German edition), distinguishing the effects of relative surplus populations in industrialised and agricultural societies;³⁹ as well as distinguishing for the first time between the concentration and centralisation of capital. The latter tendency, the centralisa-

33 *MECW*, vol. 24, p. 89.

34 In the French edition of *Capital* Volume I, Marx refers to that part of the surplus population living in 'the hell of pauperism' as 'all those people who are called les classes dangereuses' (*MEGA*² 11/7, p. 566), instead of 'the lumpenproletariat proper' (*MEGA*² 11/6, p. 586).

35 Surplus Club 2015.

36 *MECW*, vol. 35, p. 609.

37 Hobsbawm 1968, p. 149.

38 Hobsbawm 1968, p. 51.

39 *MEGA*² 11/7, pp. 624–7. See Pradella 2011, p. 97.

tion of capital in the hands of few (not necessarily private corporations), can be read as an anticipation of what was later termed monopoly or state-oriented capitalism, and it was viewed in relation to the defeat of the Paris Commune⁴⁰ as well as Marx's critique of the state as an instrument of stabilising, deepening and expanding capital's rule.

Marx was always fascinated by the idea that the development of the market society might turn into its self-destruction; modern industry and automation could possibly create a new society of abundance in relation to human needs. Yet Marx passed away just when capitalist development was about to unleash a new era of growing productive forces. By abstraction and the evidence of his time, Marx has shown that one central contradiction of capitalist mode of production is capital's constant attempt to displace labour from the production process, although abstract labour remains the substance of capital. In the third industrial revolution (computerisation, digitalisation) this contradiction seems to hit a wall, and unfolds in a dramatic way. The application of new innovations across all branches of industry causes more jobs to disappear than new jobs are created in the new industrial sectors. According to Mike Davis's book *Planet of Slums*, the global population of slum-dwellers amounted to nearly one billion in 2001 – a number almost equivalent to the total global population back in the days when the young Engels and Marx explored the streets of Manchester. A gigantic potential of freedom and disposable time has been created. The realisation of that potential requires the positive overcoming of the capital-labour relation.

40 Dunayevskaya 1988, p. 134.

The Redundant Transformation to Prices of Production: A Marx-Immanent Critique and Reconstruction*

Geert Reuten

Introduction

Completed in 2012, the *MEGA*² *Capital* part has made a tremendous contribution to our understanding of Marx's lifework *Capital*. In the light of it, I revisit in this article what probably is the main theoretical problem in *Capital*, namely the transformation of the *Capital* Volume I value concepts into the 'prices of production' of *Capital* Volume III, Part Two. Marx's own approach to this transformation, and its implications, was subsequently dubbed the 'transformation problem'.

Marx sets out this transformation in an 1864/65 research manuscript of what would become *Capital* Volume III. At this time *Capital* Volume I existed in a draft form that differed from the version that was actually published in 1867. In the 1864/65 manuscript some key 'Capital I' concepts – referring to averages of the capitalist economy at large – are transformed into concepts referring to the particular sectors (or branches) of production. Here he posits a configuration of so-called 'prices of production', defined by ratios of capital and wages (capital compositions) which diverge in each sector, equalised rates of surplus-value, and equalised profit rates. After Marx's death in 1883, Engels edited and published this research manuscript in Part Two of *Capital* Volume III (1894). Soon after, however, it was discovered that Marx's transformation contains a serious flaw (see section 2 below). This flaw, and later formal-analytical extensions of it,

* <http://reuten.eu> This text is a revised version of a paper drafted in September 2014 and presented at the conference Marx's Capital – An Unfinished and Unfinishable Project? organised by the Berlin-Brandenburgische Akademie der Wissenschaften and the International Institute of Social History, Amsterdam, on 9–11 October 2014. I thank the participants for their discussion of that paper. In rewriting the text, I benefited especially from the comments by Chris Arthur, the main commentator at the conference. I also benefited from a written comment by Fred Moseley, from oral and written comments by Boe Thio, and from Jurriaan Bendien's correspondence and copy-edits (all these scholars participated in the conference).

came to be known as ‘the Marxian transformation problem’. I agree with many of the formal-analytical criticisms, and it is not my intention to repeat them here (for an overview, see Schefold 2004). Note though that the scholarly transformation controversy mainly concerns issues that Marx himself never dealt with. In that sense these are *external* criticisms, although this does not disqualify them.

My own aim in this article is to set out an *immanent* critique of the way in which Marx posited the transformation in 1864/65. For this immanent critique, I rely on the thoroughly-reworked version of *Capital* Volume I of 1866/67. In a reconstruction, I transcend the transformation as a concretisation of the *Capital* Volume I concepts of value and surplus-value. This concretisation makes the (current *Capital* Volume III) concept of prices of production redundant, as a result of which the transformation problem evaporates. Instead of dual accounts for values and prices of production, my reconstruction posits one single account. My argument focuses on the frail constraints of the transformation procedure posited by Marx himself, and thus interprets the problem as being wider in scope than in the usual appraisals.

In *Capital* Volume I, Part Four, Marx presents the determinants of relative surplus-value and the concomitant rate of surplus-value, a major one being the ‘productive force’ of labour. He associates sectoral divergences in the productive forces with divergent *value-generating potencies* of labour. Given the other determinants of the rate of surplus-value, we then obtain diverging rates of surplus-value. In the 1864/65 research manuscript of ‘Capital III’, however, Marx posits equalised rates of surplus-value, either because he had not yet developed the ‘Capital I’ notion just referred to, or because he disregarded this productive-forces determinant for unknown reasons.

My reconstruction shows how, predicated on this productive-forces determinant, diverging rates of surplus-value are associated with diverging compositions of capital and equalising rates of profit, maintaining throughout the monetary-value dimensions of ‘Capital I’. Since in the reconstruction ‘prices of production’ are redundant, that monetary-value dimension also captures balanced and non-balanced prices generally.

In line with Marx’s own view in the 1864/65 manuscript, the received view on the transformation is that the texts for ‘Capital III’ put the argument of ‘Capital I’ into question. Inverting that interpretation, I will show that the later, finalised ‘Capital I’ theory instead puts the drafts for the ‘Capital III’ transformation into question.

After some methodological and value-theoretical remarks (§1) followed by a summary of the transformation problematic (§2), I will focus on the concept of relative surplus-value in Part Four of ‘Capital I’ (§3). With that background,

I then provide the main elements for a Marx-immanent reconstruction which transcends the transformation (§ 4).

The admittedly difficult and controversial idea I propose is that Marx himself posited the *problematic* in such a way that a transformation *problem* could emerge which remains irresolvable because of its deficient premises. Thus, more than a hundred and twenty years after 1894, I want to argue that the problematic may well have been wrongly posited by Marx himself in his drafts, and therefore by his latter-day critics as well. In that case, the difficult challenge for us is to transcend the way the issue was originally framed.

Because the dating of Marx's manuscripts for *Capital* is important to this article, I present these in tabular form (see Table 8.1).

TABLE 8.1 *Marx's work on Capital from 1863 to 1867*

Volume	Dating	Draft	Remarks
C I	1863–4	penultimate draft	lost or blended into final draft (see § 2)
C III	1864–5	first full research ms.	
C II	1865	first research ms.	
	early 1866		Engels convinces Marx that he should bring out C-I, even when C-II and C-III are not completed
C I	1866–7	final draft first edition	

SOURCE: VOLLGRAF 2012¹

Making the argument in this article necessarily involves quite a number of terminological references, as well as citations from German and English texts, for which I adopt some conventions. I render the German noun '*Darstellung*' as '*exposition*', and use '*exhibit*' to refer to the setting-out of this exposition. With regard to Marx's research manuscripts, the German noun '*Forschung*' is rendered as '*investigation*' and I use '*write*', '*set out*' or variants thereof for the

1 Between 1868 and his death in 1883, Marx's continuation of *Capital* is very briefly as follows (for details, see Vollgraf 2018, Chapter 4 in the current volume):

On 'Capital I': second edition (of 1872); third edition (of 1883); French edition (of 1872–5).

On 'Capital II': 1868–70 and 1877–81.

On 'Capital III': conceptual, mathematical and comparative statistical studies (no new drafts).

setting-out of this investigation. Within cited passages, the italics are an emphasis in the original. Italics in boldface indicates my own emphasis. Unproblematic insertions in quotations are rendered in square brackets. My own comments are in braces. The abbreviation 'mt' after a page number (e.g. 370-mt) denotes my own translation. Within my translations, an original German term is likewise inserted within braces. References to the published texts of *Capital* are rendered in italics. When I refer to manuscripts prior to it, these are non-italicised in quotation marks ('Capital I', 'Capital III').

1 Method and Dimensions

To place the argument in its appropriate theoretical context, I will first make five relevant points about Marx's method and the value-theoretical dimensions which he uses.

1. In *Capital*, Marx's methodology of exposition involves different stages. He moves from the production of capital (Book I), to capital's circulation which includes the realisation-conditions of production (Book II), and finally to the concretisation of the former two stages, distinguishing on the one hand capital in its particular material manifestations (*Gestaltungen*) of sectors of production (*Produktionszweige; Anlagsgebiete*), and on the other its functional forms, such as industrial capital and finance capital (Book III). Although in my view there are good reasons for interpreting Marx's method as a systematic-dialectical one, the argument of the current paper does not rely on that interpretation.² I want to emphasise here only that – contrary to most 'economic modelling' approaches – Marx's method is one in which the general statements established within *each* one of these three stages must be claims to *general* truth. In particular, if for example a level III statement would turn out to be inconsistent with a level I statement, one of those statements must be false. (As regards a core theme in my argument in this article, for example, we cannot combine the first-stage general statement that the production of commodities and commodity transactions are determined by their value – as explained by labour-time – and a next-stage general statement that, instead, commodity production and transactions

2 For an account of the systematic-dialectics, see Reuten 2014 and various other contributions in Moseley and Smith (eds.) 2014.

are determined by prices of production that are only partly determined in that way. Similarly, we cannot combine the initial general statement that capitalist production is motivated by the production of surplus-value only, with another general statement that it is determined by an *amalgamation* of surplus-value and a capital-size related profit-levelling (dis-)agio.) In brief: the abstract statements must be true statements; they must, without additional qualification, cover the richer and more concrete statements.

2. In Marx's way of exposition of the production process in *Capital I* – the production of surplus-value and therefore of capital – he is able to as yet abstract from ('bracket') all kinds of factors that do not affect this core matter (including the realisation restrictions in *Capital II*, and the financiers' share in surplus-value in *Capital III*). In this way he can show how labour is the overall determinant for the production of surplus-value and capital.
3. The first chapter of *Capital I* is complex.³ In my view, it ought to be read in the context of the Ricardian labour-embodied theory of value which predominated in those days (recall the subtitle of *Capital I*).⁴ A main result of the chapter is that Marx breaks away from Ricardianism. For example, implicitly opposing Ricardo, Marx writes: 'Human labour-power in its fluid state, or human labour, creates value, but is not itself value. It becomes value in its coagulated state, in objective form {i.e. commodities}'.⁵ Thus the value of commodities is *explained* by labour-time. However, a full comprehension of this chapter requires a reading interconnected within the full Part One (i.e. Chapters 1–3), as including especially Chapter 3 on money.
4. It follows from this Part One that in *Capital I*, as for all of *Capital*, value entities are expressed within a monetary dimension (using some currency standard such as £); the same applies to all numerical examples.⁶ It is important to emphasise this since in some interpretations of Marx's theory, 'value' is itself taken to have a labour-time dimension (those same

3 Marx himself admits that the chapter is complicated – see his Foreword to the first edition (1867).

4 A distinction ought to be made between, first, the dominance of a school of thought (here, the Ricardian one) in university-teaching and in common appraisal and, second, research leading to new thought that might perhaps become a new dominant school in teaching and appraisal later on. There are considerable time-lapses between the two.

5 Marx 1976 [1890⁴], p. 142.

6 This was pointed out by Elson 1979.

accounts often adopt the term 'labour values' – one that is never used in *Capital*).⁷ At the expositional level of the production of capital (*Capital I*) Marx aims to *explain* value and surplus-value (within a monetary dimension) in terms of labour-time (in Parts Three to Five, 350 pages) – an explanation in terms of labour-time does, of course, not mean that *value* ever discards its monetary dimension.⁸

5. Even if Marx breaks with Ricardo (point 3 above), for some, including myself, this break is not complete.⁹ Whereas I am a proponent of a value-form theoretical interpretation and reconstruction of *Capital I*, Part One, that is not relevant for my argument in this paper. This paper is not about *Capital I*, Part One as such, and it mainly builds on its Parts Three to Five, in which such disputed matters are absent or not prominent. What is more, the reconstruction that I propose in § 4 should fit any interpretation of the value-theoretical categories. For each interpretation, the reconstruction does away with dichotomous 'value'–'prices of production' algorithms, and results in a continuity of the concept of value for each of *Capital's* levels of exposition. This conceptual continuity *includes* all specific and concrete market phenomena in terms of balanced or imbalanced market prices (*Capital II*, Part Three and *Capital III*, Part One). However, it *excludes* 'prices of production' and hence dual-account systems.

7 For example, Schefold (who is generally well acquainted with the field) does presume this. Thus, in his introduction to *Capital III*, Schefold erroneously writes 'Arbeitswerten (wie Marx sie nannte) [Labour-values (as Marx called them)]' (Schefold 2004, p. 874). Possibly Marx used this expression in some writing prior to *Capital* – Schefold cites no source – but that would surprise me very much.

8 In section 1.1 of Reuten 2004b (in Bellofiore and Taylor (eds.) 2004), I trace the dimensions and measures adopted by Marx in the explanatory Parts Three to Five of *Capital I*.

9 See the references in Reuten 1988 and 1993; here I merely mention the pivotal paper by Backhaus (1969). However, the value-form theoretic critique does not dispute Marx's explanation of surplus-value in terms of labour-time (that is, at least, my own take on value-form theory). Regarding Part One's Chapter 3, a main problem is that Marx's theory of 'commodity money' is clearly a nineteenth-century theory that is not applicable in the current age (see Campbell 1997, Williams 2000 and Bellofiore 2005 – these are contrary positions, though in my view in the end complementary ones).

2 Marx's 1864/65 Unresolved Self-Critique on His General Rate of Profit Transformation

2.1 *Introduction and Outline*¹⁰

In this article I shall refer to the field of *Capital III*, Part Two, as 'the general rate of profit transformation' (abbreviated as 'GRP transformation'). In the research manuscript for it, of 1864/65, Marx sets out a concretisation of his 'Capital I' categories, in face of the tendency toward equalisation of rates of profit between sectors, or to the formation of a 'general rate of profit' (GRP). In face of the Capital I concepts of value and surplus-value, Marx refers to this concretisation as a 'transformation'.¹¹

Before comparing the approaches of *Capital I* and *Capital III*, two points should be noted about the manuscript for *Capital I*. First, throughout much of this paper I will contrast the 1864/65 GRP manuscript with especially Part Four of *Capital I*. However, as regards the latter, we do not know what manuscript Marx had before him in 1864/65. The draft of 1863/64 for *Capital I* is either lost (as much was suggested previously by the *MEGA*² 11/5 editors, see Kopf et al. 1983), or – and this is the recent expert opinion – it was blended (*verschnitten*) into the final version compiled for the printer (convincingly argued for by *MEGA*² 11 editor Vollgraf 2012).¹²

Second, we will see in § 2.4 that Marx in his 1864/65 text compares exchanges in terms of values and in terms of prices of production. It is not altogether clear whether Marx refers here to a specific Part or to specific Parts of 'Capital I'. Anyway, as Vollgraf (2012, p. 462) sets out, Marx decided only in 1866 to include its current Part One into 'Capital I'. It is, in fact, a rewritten version of his 1859 *Critique*.¹³ I therefore assume that in comparisons such as those mentioned above he also had the 1859 *Critique* in mind. This point is relevant, because the 1859 work takes less distance from labour-embodied notions of value than

10 In references for this section, I use the following abbreviations: M = Marx 1993 (Marx's 1864/65 research manuscript for *Das Kapital III*, in *MEGA*² 11/4.2); M-BF = Marx 2016 (= the former as translated by Ben Fowkes); E = Marx 1964 (Engels's 1894 edition of *Das Kapital III*, *MEW* 25); E-DF = Marx 1981 (the former translated by David Fernbach as *Capital III*). Many of the citations in this section have been taken over from Reuten 2009, which discussed the transformation issue mainly in methodological terms.

11 The research manuscript is published in *MEGA*², 11/4.2. Engels's editorial work is published in *MEGA*², 11/14. *MEGA*², 11/15 contains the critical edition of *Das Kapital III* of 1894.

12 Kopf et al. 1983, pp. 15*–16*. Vollgraf 2012, p. 465; his full argumentation is on pp. 464–7.

13 *MEGA*² 11/2.

the 1867 text does. By implication, the general frame of the 1864/65 text, as discussed below, may lean more to the 1859 than to the 1867 one.

The standard critique of Marx's GRP transformation procedure is that it is a 'halfway house'. He transforms *Capital I* output quantities into *Capital III* output quantities, neglecting to apply that transformation to the inputs.¹⁴ He therefore obtains incorrect results (especially regarding the simultaneous aggregate equalities of, on the one hand, the commodity values and the prices of production of commodities, and on the other, surplus-value and profit). This critique is accurate, and it has been extensively dealt with already in the literature.¹⁵

However, in a way this was not Marx's problem, since he (mistakenly) neglected it, or was not aware of it.¹⁶ In this section, I approach the matter rather from the perspective of the problems that Marx was aware of in the 1864/65 manuscript. It is obvious from that text, as also its *MEGA*² editors emphasise, that this is indeed a 'research manuscript'. Thus it is an investigation for self-understanding (*Forschung*) and not an exposition (*Darstellung*). The main thesis of the current section is that Marx himself was sceptical about his own GRP transformation, because it would undermine his text for 'Capital I' – i.e. its draft at the time of writing the GRP manuscript – or also that of his *A Contribution to the Critique of Political Economy* (1859).

As indicated, for his edition of *Capital III* (1894), Engels based himself on this 1864/65 manuscript. We find the GRP transformation in Part Two (originally 'chapter'). In editing it, Engels left unchanged the main chapter *structure* of the text (chapters 8–12); however, there are changes of order within the chapters, amendments, and texts that disappear altogether.¹⁷ When discussing this manuscript, I will – for the convenience of the reader – refer to the analogous *Capital III* chapters (indicated as sections in the manuscript). I shall discuss

14 I refer to the published versions as they appear for the reader at the time of publication of the third Volume. In his Foreword to the latter, Engels provides the reader with no hint about the order in which Marx wrote the published manuscripts (even though readers might perhaps have inferred this from Engels's Foreword to *Capital II*).

15 See the overview by Schefold 2004, pp. 875–95.

16 Perhaps he was aware of it in other contexts (see e.g. his 1861–3 discussion of Bailey in the *Theories of Surplus-value*, *MECW*, vol. 32, pp. 352–3; I thank Jurriaan Bendien for pointing this out). Marx seems nearly aware of it in his manuscript for *Capital III*, 'Chapter 12' (M:283; cf. E:217, E-DF:309).

17 See also the extensive comments by the *MEGA*² editors Vollgraf and Jungnickel (1995) about Engels's own mark on the text ('Engels left only few of Marx's sentences untouched' – p. 47, my translation). See likewise Heinrich 1996–7, pp. 456–64.

its three main chapters 8–10, and ignore the two smaller chapters 11–12 that can be regarded as ‘addenda’. In brief, Chapter 8 sets out the general problematic for this transformation as Marx perceives it; Chapter 9 provides a solution; and Chapter 10 reflects on the consequence of this solution.

2.2 ‘Chapter 8’: *The Problematic*

At the very beginning of Part Two (originally chapter), Marx immediately delimits the scope of his theorising about the rate of surplus-value. He writes: ‘In this chapter [i.e. Part] the rate of surplus-value is *presupposed* {*vorausgesetzt*} to be constant’ and particularly it is ‘presupposed’ to be ‘equal’ for all spheres of production.¹⁸ It is repeated regularly throughout the part. Only later on (in ‘Chapter 10’) Marx writes that equality in the rate of surplus-value is not just a simplifying assumption, but rather a *law* which is predicated on competition between workers:

[E]quality in the *grade of exploitation of labour* or the *rate of surplus-value* ... presupposes competition among the workers and an equalisation that takes place by their continual {*beständige*} emigration from one sphere of production to another to another.¹⁹

M-BF:286-amended; M:250; cf. E:184, E-DF:275

Anticipating § 3 and § 4, I indicate already here that I have no problems with this competition determinant of the rate of surplus-value (concerning the ‘intensity of labour’). In this manuscript, however, Marx neglects the productive-forces determinant of the rate of surplus-value that he treated in *Capital I* (see § 3.2).

Chapter 8 sets out the following (further) presuppositions:²⁰

18 M-BF:250-amended; M:212; cf. E:151; E-DF:241. The manuscript has ‘chapter’; Engels apparently forgot to change this into ‘part’. The term ‘presupposition’ (*Voraussetzung*) is not quite the same as an ‘assumption’ (which would rather cover the German *Annahme*). See also Inwood 1992, p. 224.

19 Marx continues: ‘A general rate of surplus-value of this kind – as a tendency, like all economic laws – is presupposed by us as *theoretical* simplification; but in practice it is an actual presupposition of the capitalist mode of production, even if inhibited to a greater or lesser extent by practical frictions ... In theory we presuppose that the laws of the capitalist mode of production develop in their pure form’. (transl. amended)

20 M:223–4, 229–30 – cf. their version of E:162 and E-DF:252. Below the formulas in square brackets have been added. The subscripts i and j refer to any sector. The other symbols are defined as follows: s = surplus-value; v = the wages sum; s' = the rate of surplus-value

- [A] Commodities are sold 'at their values'.
- [B] Rates of surplus-value are equalised. $s'_i = s'_j$
- [C] Compositions of capital diverge.²¹ $(c/v)_i \neq (c/v)_j$
- [D] Hence [A-C] equal capitals produce unequal surplus-value or profit. $[s/(c+v)]_i \neq [s/(c+v)]_j$
- Therefore we obtain diverging rates of profit. $r'_i \neq r'_j$
- [E] Yet, in fact, we have (tendentially) equalised profit rates. $r'_i = r'_j$

Hence this set of presuppositions is incompatible.²² At least one of these must be wrong, it remains to find out which one(s).

2.3 'Chapter 9': *The Transformation as a Formal Result*

Because the constellation [A]-[C] is inadequate, Marx's next chapter widens the theoretical terrain. He introduces the new concept of 'production price', which is predicated on the existence of a general rate of profit (M:233-4). The production price is 'a transformation of value' (*'eine verwandelte Form des Werths'* – M:239; E:173).

The status of this transformation is very different from the *purely conceptual* one that Marx had set out in Part One of the manuscript for *Capital III*, and in which no quantitative differences are involved.²³ Marx is well aware that, for his Part Two transformation, we do have different quantities, at least for the micro level.

The chapter starts out by repeating the presupposition about the rate of surplus-value [B]. Marx also introduces a number of simplifying presupposi-

($s'=s/v$); c = constant capital; c/v = the 'composition' of capital; r' = the rate of profit ($r'=s/(c+v)$).

21 Marx explicitly indicates that diverging turnover times offer the same problematic (e.g. M:229).

22 M:229-30.

23 Chapter 1: 'From the point of view of its material, the *profit* ... is nothing other than the *surplus-value* itself. Its absolute magnitude does not therefore differ from the absolute magnitude of the surplus-value. ... it is however a *transformation* {*verwandelte Form*} of the latter ...' (M-BF:50-1-amended; M:8-9).

tions, such as the full and linear depreciation of fixed capital within a year, and equal turnover times (M:230–1).

Next, he sets out the famous three schemes.²⁴ The first and the second scheme apply presuppositions/theses [A]–[D]. The third scheme applies [B]–[C] and [E] and introduces prices of production. Regarding ‘values’ versus ‘prices of production’ and ‘surplus-value’ versus ‘profit’ Marx characterises the third scheme variously in terms of ‘deviation’ (*Abweichung*), ‘even distribution’ (*gleichmässige Verteilung*) and ‘balancing adjustment’ (*Ausgleichung*).²⁵ In what follows, I will often use the single term ‘adjustment’, especially when referring to the transformation of surplus-value into profit. For the sake of brevity, Table 8.2 compresses these three schemes to one single and reduced one.

TABLE 8.2 *Reduced transformation scheme*

	<i>Capital I</i> in apparent hindsight					<i>Capital III</i> after transformation				
	c	v	s	c+v+s	$r' = s/(c+v)$	c	v	adjustment ρ	$c+v+\rho$	$\pi = \rho/(c+v)$
low CC	70	30	30	130	30%	70	30	30 – 10	130 – 10	20%
average CC	80	20	20	120	20%	80	20	20	120	20%
high CC	90	10	10	110	10%	90	10	10 + 10	110 + 10	20%
<i>total</i>	240	60	60	360 †	20%	240	60	60	360 ‡	20%

Notes: † ‘values’

‡ prices of production

Thus Marx drops sales at value (presupposition [A]), introduces production prices instead, and thereby gets rid of diverging profit rates (presupposition [D]). He does this without hardly any argument: ‘Their presupposition [i.e. of production prices] is the existence of a *general rate of profit* ... In actuality the very different profit rates ... are balanced out by *competition* into a *general rate of profit* ...’ (M-BF:269-amended; M:234; cf. E:167; E-DF:257) Note that he maintains the disproportional *production* of surplus-value [D] (M:234–5). However,

²⁴ M:231–3; E:165–6; E-DF:255–6.

²⁵ M:233; cf. E:166–7 and E-DF:256. Engels omits the ‘ausgleichen’, hence its translation is absent in Fernbach.

presupposition [A] is not abandoned altogether. At this point in the text, Marx posits one of the famous two aggregate equalities, i.e. that of ‘values’ and production prices.²⁶ The aggregate equality of profits and surplus-value is posited throughout.

Finally, with regard to Chapter 9, I draw attention to the passage where Marx seems quite happy about what he has achieved so far, declaring that ‘the inner connection’ between value and production price and between surplus-value and profit is ‘revealed here for the first time’ (M-BF:280; M:245; cf. E:178 and E-DF:268).

2.4 ‘Chapter 10’: *The Transformation Process – Marx’s Unresolved Self-Critique*

In Chapter 10 Marx reflects on, and questions, what he has accomplished in the previous chapters, including the consequences for his self-interpretation of the concept of value set out in his manuscripts. Here the scene seems much more gloomy and dismal. After two pages connecting the two chapters, Marx posits two research questions – one immediately after the other (I call these Question 1 and Question 2):

{Question 1} The really difficult question here is this: *how does this equalisation of profits* or this establishment of a general profit rate *take place*, since it is evidently a result and cannot be a point of departure?

{Question 2} It is clear first of all that an *assessment of commodity values*, e.g. in money, *can only be a result of* exchanging them, and that, if we presuppose such an assessment, we have to view it as a result of *actual exchanges of one commodity value against another*. But how could this exchange of commodities at their actual values have come about?

M-BF:285 – amended; M:250; cf. E:183–4, E-DF:274–5

Marx devotes some twenty pages to Question 2, before he gets to the first. He repeats (M:250) that such exchange (given the equalised rate of surplus-value presupposition, as he once again stresses) would result in unequal profit rates.²⁷ Obviously the production prices of the research manuscript for Chapter 9 put into question the (current) *Capital I*, Part One, exposition of ‘actual’ commodity

26 When he posits this equality, he seems to feel that there is a difficulty (M:236–7; E:169–70; E-DF:259–60; cf. M:241–3 on the same theme).

27 Note that for the following 20 pages Engels maintains the structure of Marx’s text.

exchange according to value.²⁸ It is clear from the text that Marx was greatly bothered by this. My reading is that Marx sets out, in an unsystematic way, a number of analytical consequences of where he has got to with the argument, together with some possible ways out. We find, for example, a model-like case in which workers own the means of production and exchange products according to their value; then a move to a 'historical transformation'; next a long *détour* on *market* value and supply and demand generally, without really coming to the point (in his work of 1896, all this was rightfully ridiculed by Böhm-Bawerk in this context – that is to say, Engels's rendering of it).²⁹ The 'try out' of the historical transformation especially is inconsistent with Marx's method of systematic exposition.³⁰

On page M:267 (E:203; F:294), Marx finally arrives at a systematically relevant statement. Note that he uses the kind of 1859 (or 1867) terminology of exchange (Engels puts the following in the past tense, suggesting an even more direct reference to *Capital I*, Chapter 1 – remarkably the translator of the manuscript does the same; amended below):

In considering money, it is assumed that commodities are sold at their value, because there is no foundation {*Grund*} to consider prices that diverge from value since the concern is just the changes in form that commodities have to undergo when they are turned into money and then transformed back into commodities again ... it is completely irrelevant for them *as such* [the commodities] whether the realised commodity price stands *below* or *above* their value. The *value* of the commodity as groundwork {*Grundlage*} remains important, since money can only be developed conceptually from this foundation {*Fundament*}, and *price*, in its general concept {*seinem allgemeinen Begriff nach*}, is only *valeur monetiste* {monetised value; the two words appear in French}.

M-BF:303 – amended; M:267-mt; cf. E:203, E-DF:294–5

28 Instead of *Capital I*, Part One, we can take the 1859 *Critique* as a reference point. Marx refers to this work on page M:257 (E:191–2).

29 Böhm-Bawerk of course read the text as a final document – that is, as polished by Engels.

30 Engels, on the other hand, seems to have liked the idea. It has given rise to a historical, as against systematic, interpretation of *Capital I*, Chapter 1 – rightly criticised by Arthur, in Moseley and Campbell (eds.) 1997. Such an interpretation, however, cannot save the Chapter 9 procedure (even neglecting the latter's problems of the two aggregate conditions).

Marx shows here himself (implicitly that is) that the two drafts that he has (the current and the one for 'Capital I', the latter perhaps also in reference to the 1859 *Critique*) cannot be simply combined.

Recall Marx's 'really difficult' Question 1 – how does the equalisation of profit rates actually come about? His answer to it (M:269–70; E 205–7; E-DF:297–8) is rather limited. We learn mainly that capital moves from sectors of low profitability to sectors of high profitability, and that the thus affected supply in relation to demand establishes prices of production, surplus-value 'adjustment' and the rate of profit equalisation. (Note that processes of capital movement affecting supply and demand and establishing equal rates are *by themselves* nothing new (in 1864/65) – these are also part and parcel of classical political economy.)

2.5 Conclusion

Generally Marx shows in this text that his solution regarding the general rate of profit and his text for 'Capital I' – i.e. its draft at the time (1864/65) – cannot simply be combined.³¹ I emphasise that Marx's worries overarch those of the post-Marx criticisms: even if he would not have made the formal mistake of neglecting the transformation of inputs, his own problems with the manuscript would still prevail (these problems are not resolved in the standard post-Marx solutions to the transformation problem). Presumably these problems played (among many others) a considerable role in Marx's failure to finish his *Capital* project and publish it.³²

3 'Productive Forces', 'Intensity of Labour' and the Rate of Surplus-Value in *Capital I*

3.1 Preliminary Remarks³³

Six preliminary remarks are in order here:

1. In the next section (§ 4), I undertake an immanent reconstruction of the GRP problematic – 'immanent' in the sense that I base myself on Marx's own text. Divergent rates of surplus-value in different sectors

31 Howard and King (1989, p. 37) comment: 'Engels accepted Marx's defective solution to the transformation problem uncritically. He did not, indeed, follow up or even comment upon the uncertainties expressed by Marx himself concerning the volume III solution'.

32 As Marx indicates, the same type of problems apply for the turnover of capital (cf. Part Two of the current *Capital* Volume II, where the GRP is yet abstracted from).

33 References in this section are as follows: M¹ = Marx 1867¹ (*Das Kapital I*, 1st edition 1867,

of production are at the core of this reconstruction. In §3, I therefore reconsider Marx's exposition of surplus-value and the rate of surplus-value in *Capital I*, in order to argue that the key to the solution of the transformation problematic is found in *Capital I*, Parts Four and Five on the production of relative surplus-value.

2. Recall Marx's exposition of surplus-value in *Capital I*, in which he draws a distinction between absolute surplus-value (Part Three) and relative surplus-value (Part Four), each predicated on some given real wage per working day. Then the *absolute surplus-value* varies with the length of the working day. The *relative surplus-value* varies with the production costs of the wage bundle. Thus, at a given length of the working day (and hence with a given absolute surplus-value), the surplus-value in its aspect of relative surplus-value may increase, when the value of commodities that make up the wage bundle decreases (and vice versa).
3. Recall from my §1 that 'value' has a monetary dimension, and that Marx aims to *explain* value and surplus-value in terms of labour-time.
4. It is relevant to emphasise that, in most of *Capital I*, Marx reasons from economic averages – including their change.³⁴ This also applies especially for most of what Marx develops in the 350 pages of Parts Three to Five, where he discusses (changes in) the 'average' production of surplus-value and the average capital. Marx repeats over and again that he is only considering averages (also alternated with the term 'normal'). Except when he discusses *changes* (especially in productive forces), differences between sectors are bracketed out.
5. It is just as relevant that the concept of the 'composition of capital' (the *c/v* ratio) makes its proper appearance only in Part Seven of *Capital I*. In the relevant Parts Four and Five, the capital composition is mostly only

MEGA² II.5); M⁴ = Marx 1962 (*Das Kapital I*, 4th edition 1890, MEW 23); F = Fowkes's translation of the former (Marx 1976, *Capital I*, 4th edition 1890). All key quotations in this section have been checked against the first German edition of *Capital* (1867), because that is nearest to the 1864/65 manuscript. Chapter references are to the German editions, with those of the deviating English edition as superscript (e.g. Chapter 13^{Eng.15}).

34 I stressed this in Reuten 2004b, but it is emphasised much more by Vollgraf (2012, pp. 450–1). He points to Marx's acquaintance with the work of Quételet, a Belgian mathematician and statistician who in a work of 1835 was the first to apply 'averages' in social science. Vollgraf also quotes Marx on Quételet from the 1863–5 manuscript (its p. 879). This might seem to imply that Marx's usage of 'averages' in *Capital I* is not casual (in a footnote in *Capital I*, Marx refers in passing to Quételet – M¹:261, n. 8; M⁴:342, n. 8; F:440, n. 1).

implicit (it is alluded to in Part Four's Chapter 13^{Eng.15}).³⁵ Notably it is not alluded to in Chapter 10^{Eng.12} on the productive forces of labour, where the discussion in the next subsection starts.

6. Regarding the standard English translation of *Capital I* by Ben Fowkes, I note here that he translates the German *Produktivkraft* as 'productivity'.³⁶ This does not cover the meaning of the term. It is moreover unfortunate, because Marx sometimes also uses the term *Arbeitsproduktivität* (labour productivity). In all of the following citations, I have amended the translation for *Produktivkraft* to 'productive force' (marked *...*; I use the same mark for any other amendments of the translation). Fowkes also misses the related term *potenzierte Arbeit* (see below). The same applies for the Moore and Aveling translation. These remarks highlight that the art of translation is inevitably also one of interpretation. All English citations below have been checked against the German editions (M¹ and M⁴).

3.2 *The Productive Force of Labour: Degree of Value-Generating Potencies of Labour*

I will now show how Marx posits *diverging rates of surplus-value* between sectors of production according to the development of the productive forces.

Marx systematically introduces the 'productive force' of labour in Part Four, Chapter 10^{Eng.12}.³⁷

35 M⁴:466–7 and 473–4; F:571 and 577–8.

36 Most of the time at least – e.g. on page F:453 2nd paragraph, Ben Fowkes translates *Produktivkraft* as 'productive power' and on page F:508 it is translated as 'productive forces' (cf. M⁴:407). Not only do we lose terminological connections, the English text also makes connections that are absent from the German (especially with the German term *Produktivität der Arbeit*, and when Fowkes translates this as 'productivity of labour', 'productivity' being his most frequent translation for '*Produktivkraft*'). We have the same problem in the *Results* (translated by Livingstone). Moore & Aveling (*Capital I*, edition of 1887) translate *Produktivkraft* as 'productiveness' (at least those instances I have checked). Generally, there are two translation options for the term *Kraft* as in *Produktivkraft*: power and force. The former is adopted in the *Grundrisse* translation (productive power) and the latter in *The German Ideology* and the 1859 *Critique* Introduction (productive force).

37 Earlier (Chapter 1) he wrote: "The productive force of labour" is determined by a wide range of circumstances; it is determined amongst other things by the workers' average degree of skill, the level of development of science and its "technological applicability", the social organisation of the process of production, the extent and effectiveness of

[I]ncrease in the *productive force* of labour ... cannot be done except by an alteration in his [the labourer's] tools or in his mode of working, or both. Hence the conditions of production of his labour, i.e. his mode of production, and the labour process itself, must be revolutionized. By an increase in the *productive force* of labour, we mean an alteration in the labour process of such a kind as to shorten the labour-time socially necessary for the production of a commodity, *hence a smaller quantity of labour acquires the force* of producing a greater quantity of use-value.

F:431 amended; M⁴:333

In other words, the effect of such a change is that one worker works up (*verarbeitet*) more means of production.³⁸ Marx considers the transition from the one state of the productive forces to a new one as initiated by some individual capitalist (F:433–6; M⁴:335–8). As regards the labour producing at the increased productive force, he states the following key sentence:

Die Arbeit von ausnahmsweiser Produktivkraft wirkt als *potenzierte Arbeit* oder schafft in gleichen Zeiträumen *höhere Werte* als die gesellschaftliche Durchschnittsarbeit derselben Art. (M⁴:337; M¹:257)³⁹ [The labour operating at this exceptional productive force acts as *potentiated labour*;⁴⁰ it creates in equal periods of time *greater values* than average social labour of the same kind. (my translation)]⁴¹

the means of production, and the conditions found in the natural environment'. (F:130 amended; M⁴:54)

38 Marx uses this term 'verarbeiten' (working up) only occasionally (e.g. in Chapter 6^{Eng.8}, M⁴:225; F:319 'one man may now, with the aid of one expensive machine, work up one hundred times as much raw material').

39 In the first edition, there are two emphases: 'Die Arbeit von *ausnahmsweiser* Produktivkraft wirkt als *potenzierte* Arbeit oder schafft in gleichen Zeiträumen höhere Werthe als die gesellschaftliche Durchschnittsarbeit derselben Art'. (M¹:257)

40 An alternative translation might perhaps be 'exponentiated labour' or 'empowered labour'.

41 Fowkes (p. 435) renders: 'The exceptionally productive labour acts as intensified labour; it creates in equal periods of time greater values than average social labour of the same kind'. We find the 'intensified' also in the earlier translation by Moore and Aveling (p. 457). This is wrong, also because it risks making a confusing reference to the treatment of 'intensity of labour' discussed in Chapter 13^{Eng.15}. Marx, as we will see, carefully distinguishes between the two.

Therefore, the above-average potentiated labour – labour with extra value-generating potencies – cannot be simply measured in clock-time. Note that Marx thus draws a distinction between the ‘value productivity of labour’ (the value produced per unit of time) – the last quotation – as opposed to labour’s ‘use-value productivity’ (the physical quantity of commodities produced per unit of time) – the last-but-one quotation.

Marx continues:

Hence, the capitalist who applies the improved method of production, *appropriates as surplus-labour* a greater portion of the working-day than the other capitalists in the same business. He does as an individual what capital itself taken as a whole does when engaged in producing relative surplus-value. On the other hand, however, this extra surplus-value vanishes, as soon as the new method of production is generalized

...

F:436; M⁴:337

Thus Marx feels (rightfully) constrained to exhibit a change in the socially-average production force as a change within one sector of production (of course other changes may occur in other sectors). Note that whereas he suggests a generalisation of the implementation of productive forces within a sector, he (rightfully) posits no mechanism for inter-sectoral generalisations of the development of the productive forces (equalisation of compositions of capital?!). However, *given the value-generating potencies, this implies divergences in rates of surplus-value between sectors* – that is, under the condition that there are diverging productive forces of labour.

Note that Marx emphasises here the ‘exceptional’ and ‘vanishing’ character of the implied divergences in rates of surplus-value (apparently due to competition). I will show in § 4.3 that this circumstance is not obvious (the main point is that, in the current exposition, Marx is not explicit about the composition of capital. Should a change in productive forces in a sector go along with an above-average c/v then the extra surplus-value or some of it will not vanish, whence we have sectoral diverging rates of surplus-value.)

The notion of *potenzierte Arbeit* reoccurs one more, relevant, time in *Capital I* (Chapter 13^{Eng.15}):⁴²

42 In § 3.5 I will refer to another, different, occurrence.

Machinery produces relative surplus-value, not only by ... cheapening the commodities that enter into its [labour-power's] reproduction, but also, when it is first introduced sporadically into an industry, by converting {*verwandlen*} the labour employed by the owner of that machinery, into *potentiated* labour ... During this transitional period, while the use of machinery remains a sort of monopoly, profits are exceptional {*außerordentlich*} ...⁴³

F:530 amended; M⁴:428–29; M¹:333

In the same chapter (13^{Eng.15}), we find another reference to divergent sectoral rates of surplus-value related to the productive forces:⁴⁴

The use of machinery for the exclusive purpose of cheapening the product is limited ... by the difference between the value of the machine and the value of the labour-power replaced by it. Since *the division of the day's work into necessary and surplus-labour differs* ... *simultaneously* *in different branches of industry* ... it is possible for the difference between the price of the machinery and the price of the labour-power replaced by that machinery to *vary very much* ... [It] determines the cost to the capitalist of producing a commodity, and influences his actions through the pressure {*Zwangsgesetze*} of competition.^{45,46}

F:515–16 amended; M⁴:414; M¹:321

Comment. Overall, we find in *Capital I* three types of statements and arguments about generalisations and averages:

- First, *generalisations* (which are applicable in each case). For example, in capitalism, production takes the form of commodity production; or, value takes the form of monetary value.
- Second, *averages accounts*. In *Capital I*, these are most often social averages (for the economy at large). A problem with Marx's terminology is

43 The latter (Marx 1867¹) has several terms emphasised, including 'potencies' (*potenzirte*) and 'transitional'.

44 I thank Boe Thio for drawing my attention to this passage.

45 The latter text (Marx 1867¹) has several phrases emphasised.

46 The text that I emphasised reads in German (in full): '*Da die Teilung des Arbeitstags in notwendige Arbeit und Mehrarbeit in verschiedenen Ländern verschieden ist, ebenso in demselben Lande zu verschiedenen Perioden oder während derselben Periode in verschiedenen Geschäftszweigen; ...*'

that he often conflates ‘general’ and ‘grand average’ throughout his research manuscripts and final texts – sometimes explicitly.^{47,48}

- Third, *distinctions within the averages*. In *Capital I*, Marx mostly summarises these later on in the text, in terms of averages (for the distinctions above, we will see this in § 3.4).

Each time the reader has to be very alert about the type of statement Marx is actually making. Thus, in the quotations that I provided above, Marx sets out sectoral distinctions and, in particular, differences in rates of surplus-value. These are of course levelled out in an averages account. One of my main points is that, when we get to sectors of production in a *systematic* way (the concretisation of *Capital III*, Part Two), all these sectoral distinctions – including diverging rates of surplus-value – must be accounted for.

3.3 *Intensity of Labour: Degree of Value-Generating Density of Labour*

In Chapter 13^{Eng.15} of Part Four, Marx systematically introduces the ‘intensity of labour’. One important point about it is that, once again, labour-time cannot be simply measured in terms of clock-time. Now, however, for reasons other than those for changes in productive forces, he writes:

It [intensification of labour] imposes *on the worker* an increased expenditure of labour within a time which remains constant, *a heightened tension of labour-power*, and a closer filling-up of the pores of the working day, i.e. a condensation of labour, to a degree which can only be attained within the limits of the shortened working day. This compression of a greater mass of labour into a given period now counts for what it really is, namely an increase of the quantity of labour. In addition to the measure of its ‘extensive magnitude’, *labour-time now acquires a measure of its *degree of density**⁴⁹ ... The same mass of value is now produced for the capitalist by, say, 3½ hours of surplus labour and 6½ hours of neces-

47 As in the title of *Capital III* Chapter 9, which is identical in the research manuscript: ‘Formation of a general rate of profit (average rate of profit), and ...’

48 One reason might be that Marx is only gradually making up his mind about the importance of averages – see Vollgraf 2012, referred to in footnote 43 above.

49 ‘Neben das Maß der Arbeitszeit als “ausgedehnter Größe” tritt jetzt das Maß ihres Verdichtungsgrads’. Concerning the term ‘measure’, a general warning – for all of *Capital* – is appropriate: the meaning of the German term *maß* is complicated. The relevant meaning *here* seems near to ‘gradation’ or ‘degree’ – or ‘measure’ as in the phrase ‘to considerable measure’ (for at least some explication of the term, see Inwood 1992, p. 240).

sary labour, as was previously produced by 4 hours of surplus labour and 8 hours of necessary labour.

F:534 amended; M⁴:432–3

Marx next uses terms like ‘degree of power exerted’ (*Grad der Kraftäußerung*), ‘energy of labour’ and ‘discipline’ (F:535; M⁴:433). In brief, this concerns the effort and strain of labour. In so far as there are intra-sector or inter-sector differences in intensity, and *to the extent* that it is the intensity that affects divergences in the intra-sector or inter-sector rates of surplus-value, these are likely to be levelled out by intra-labour competition. From *this* perspective, and this one only, the Marx of 1864/65 is quite right to posit equalised rates of surplus-value (presupposition [B] in § 2.2).

3.4 *Separate and Combined Average Variations in Productive Force and Intensity*

In Chapter 15^{Eng.17} of Part Five – synthesising Parts Three and Four – the main focus is on social averages (this also applies for the next and last chapter of this Part, which I will not discuss here). Marx indicates that at a given average real-wage rate per ‘normal working day’, the rate of surplus-value depends on:⁵⁰

- (1) the length of the working day, or the extensive magnitude of labour,
- (2) the normal intensity of labour, or its intensive magnitude, whereby a given quantity of labour is expended in a given time and (3) the *productive force* of labour, whereby the same quantity of labour yields, in a given time, a greater or a smaller quantity of the product, depending on the degree of development attained by the conditions of production.

F:655 – amended; M⁴:542

Marx emphasises strongly that the three determinants mentioned in this passage are not only variable, but also may occur separately or in several combinations. In what follows after this passage, he analyses each of these in turn, in four separate sections. Marx here usually assumes that the determinants have been generalised across the economy, whereas the previous chapters that I discussed (§ 3.2 and § 3.3) also treated (the initiation of) changes.⁵¹

50 Next to the normal sales of commodities at their value, Marx assumes that the price of labour-power may at times be above its value, but not below it.

51 Marx opens the first section by stating: ‘A working day of given length always creates the same amount of value, no matter how the productivity of labour, and, with it, the

3.5 A Digression on 'Potentiated Labour' in Chapter 1

By itself, the notion of different value-generating potencies of labour (§ 3.2) is not a novel issue within Marx's systematic of *Capital 1*. In its Chapter 1 he uses a similar notion:

*Simple average labour ... varies ... at different cultural epochs ... but in a particular society it is given ... More complex labour counts only as *potentiated* or rather multiplied simple labour, so that a smaller quantity of complex labour *is equal* to a larger quantity of simple labour ... In the interests of simplification, we shall henceforth view every *kind* of labour-power directly as simple labour-power; by this we shall simply be saving ourselves the trouble of making the reduction.*

F:135 amended;⁵² M⁴:59; cf. M¹:20⁵³

We see that, already at this point, Marx starts his *Capital 1* 'averages account'. The similarity of the Chapter 1 and the Chapter 10^{Eng.12} notions is that the *same* clock-time of different kinds of labour creates *different* quantities of value (due to different labour potencies). We now assume transposition between reduction and non-reduction, which is, depending on the type of value theory

mass of the product and the price of each single commodity produced may vary'. (F:656; M⁴:543.) Given Marx's earlier exposition (§ 3.2 above) I take it that he refers to the social averages of labour-time and value. The first section ends with a preview in which Marx moves beyond averages: 'I shall show in *Book III* that the same rate of surplus-value may be expressed in the most diverse rates of profit, and that *different rates of surplus-value* may, under certain conditions, be expressed in the same rate of profit'. (F:660; M⁴:546–7; M¹:423.) Concerning the last phrase of this sentence: at this point Marx does not seem worried about differing rates of surplus-value. In the second section, he writes: 'Increased intensity of labour means increased expenditure of labour in a given time ... Whether the magnitude of the labour changes in extent or in intensity, there is always a corresponding change in the magnitude of the value created, independently of the nature of the article in which that value is *actualised* {*sich darstellt*}'. (F:660–1, amended; M⁴:547–8.) Marx does not posit (here) a tendency toward equalisation of the intensities, but in the following he is perhaps near to suggesting it: 'If the intensity of labour were to increase simultaneously and equally in every branch of industry, then the new and higher degree of intensity would become the normal social degree of intensity, and would therefore cease to count as an extensive magnitude'. (F:661–2; M⁴:548.) I suppose that the last 'extensive' is a mistake and that it should instead read 'intensive'.

52 Fowkes has 'intensified' for the German 'potenzierte'.

53 There are some deviations between the German editions.

one holds, at least theoretically not a simple matter.⁵⁴ Then, starting from a given heterogeneous amount of labour, the difference between the two potency notions is that the labour within one sector may acquire an extra value-potency due to an increase in productive forces (*at least* before ‘this extra surplus-value vanishes’ i.e. before ‘the new method of production is generalised’ – the third quote in § 3.2). Because there is no mechanism that should depreciate the value created in other sectors, we have an *at least* temporary increase in the economy-wide average value and surplus-value (which might be akin to such change from the one to the other ‘cultural epoch’).

3.6 Conclusions

With the composition of capital still being implicit, Parts Three to Five of *Capital I* are mainly an exposition of *the determinants of* the average rate of surplus-value, and changes in that rate. The first determinant is the average real-wage rate per working day of labour of average quality. The further determinants are: (1) the length of the working day; (2) the intensity of labour; and (3) the productive force of labour. These further determinants can arise either separately or in several combinations.

The intensity affects the ‘density’ of labour, while in contrast the productive forces affect its ‘potency’. Each of the *non-generalised changes* in the intensity or the productive force of labour mean that the *value* produced in one hour of labour diverges between capitals (whether intra-sectoral or inter-sectoral). Differing intensities of labour can be presumed to be equalised due to competition between workers. However, there is apparently no mechanism for the equalisation of productive forces (or techniques) between sectors. Hence Marx does not posit it: he can only exhibit the matter for single sectors. Given the extra value-generating potencies of labour as associated with above-average productive forces (§ 3.2), this is a key point, because in this way we obtain diverging rates of surplus-value between sectors, that is, when the development of the productive forces is unequally diffused across the economy. (I would add that an equal diffusion is not likely – see further § 4.4, and the remarks here below.)

Addendum. Given Marx’s exposition of the productive forces recapitulated above, it is relevant to now briefly refer back to the 1864/65 GRP manuscript. Because, as indicated in § 2.1, the 1863/64 draft for *Capital I* is missing, we do

54 I have shown in Reuten 1993 that this reduction precludes the interpretation that Marx would hold any simple pre-market labour-embodied theory of value, because there is no other way to make the reduction than via the labour market.

not know if the conceptualisation from 1867 presented in § 3 is richer than that in the missing manuscript, which is the one that Marx presumably had in mind when he wrote the GRP manuscript.

However, all the evidence that we have indicates that Marx developed his insights regarding the technique-related 'potency of labour' only in 1866–7, when he worked on the final draft for the first edition of *Capital I*. Regarding the 1861–3 text this can be checked, since we have these texts: *MECW* 30 and 34 (based on *MEGA* 11/3). Further, of the 1863–4 penultimate draft for *Capital I* we have the 1864 *Results* (*MECW* Vol. 34, pp. 355–466). In this text Marx presents a quite extensive treatment of technical change. Nevertheless, as in the earlier manuscripts, he here treats only the intensity of labour.

The term 'productive forces' (or also 'technology') is mentioned several times in Chapters 1–2 of the 1864/65 manuscript (i.e. Parts One–Two of the current *Capital III*).⁵⁵ However, in those passages Marx keeps the rate of surplus-value constant.⁵⁶ The notion of (extra) value-generating potencies of labour or a variant thereof is not mentioned.

It is appropriate to indicate, however, that Marx in this 1864/65 manuscript considers specific sectors of production to have developed some specific 'gradation' in the development of the productive forces of labour. Next he associates this gradation with the proportions of the composition of capital:

[T]he specific development of the social productive force of labour in each particular sphere of production varies in degree depending on how large a quantity of means of production are set in motion by a definite quantity of labour ... such capitals as contain a larger quantity of constant capital ... than the social average capital are called capitals of *higher* composition ...⁵⁷

Finally – keeping the rate of surplus-value uniform – he associates these grades and proportions with the deviations of production prices from values.⁵⁸

55 Chapter 1 (Part One): *MEGA*² 11/4.2 pp. 78–9, 81–2, 103, 108–9, 112, 114–23; Chapter 2 (Part Two): *MEGA*² 11/4.2 pp. 241–3, 247.

56 See especially his statement on pages 110, 118 and 164 (Chapter 1/Part One) and 212 (Chapter 2/Part Two).

57 He writes this in the text that became Chapter 10 (*MEGA*² 11/4.2, p. 241, my translation; cf. *Das Kapital III*, MEW, vol. 25, p. 173; *Capital III*, Fernbach translation, pp. 263–4).

58 Ibid.

4 An Immanent Reconstruction: The 1864/65 GRP Transformation in Face of *Capital I*

4.1 Introduction

Although value is produced by labour and labour only, diverging productive forces of labour (and perhaps concomitantly diverging compositions of capital) mean that value and surplus-value cannot be simply explained in terms of labour clock-time (value-form theory has always emphasised this, but for different reasons.)⁵⁹

When we leave the social-averages account, and move to the presentation of sectors of production with their distinct 'gradation' in the development of the productive forces of labour (i.e. the level of abstraction of 'Capital III, Part Two'), it is far from obvious to posit equalised rates of surplus-value between sectors. Nevertheless, as we have seen (§ 2.2) this is what Marx does in the GRP manuscript. In that manuscript, he decisively posits the uniformity of rates of surplus-value for all sectors as predicated on the *competition between workers*. Hence it would seem that (in 1864/65, though not so in 1867) rates of surplus-value *uniquely* reflect the physical *intensity* aspect of the exploitation of labour, leaving no room for its productive-forces aspect.

Workers, from their own perspective, have an interest in: the real wage (the value of labour-power), the length of the working day and the intensity of labour. These determine the degree of physical exploitation, and these can be supposed to be levelled out by competition among workers. The final determinant of the rate of surplus-value, i.e. the productive forces, is apparently of no importance for their competition (it is the capitalists' thing, so to speak). This is the key point neglected by Marx in his 1864/65 GRP transformation, whence he posits equalised rates of surplus-value.

As far as I am aware, this position of Marx has never been questioned in the main debates on 'the' transformation problem.⁶⁰

⁵⁹ See the references in footnote 9 above.

⁶⁰ However, prior to those main debates (prior to the publication of *Capital III*) two authors, Stiebeling (1890) and Wolf (1891), anticipated in fairly general terms the relevance of the productive forces for divergent sectoral rates of surplus-value. They expressed their views in connection with Engels's (1885) 'prize essay contest' about the consistency of 'the law of value' in the face of divergent sectoral compositions of capital. (See the Appendix.) Their contributions were inaptly ridiculed by Engels in his Preface to *Capital III*.

4.2 *Main Elements for a Reconstructive Account of the GRP as a Stage of Concretisation*

The core of a Marx-immanent reconstruction of the GRP problematic is simple. We maintain the *Capital I* concept of value (presupposition [A]). We maintain diverging compositions of capital (presupposition [C]). We posit diverging rates of surplus-value ([B']) instead of presupposition [B]). Hence, we have equalising profit rates (E). We thus have no GRP transformation problematic, and much of what is written in Part Two of *Capital III* is redundant. Because presupposition A is maintained, any value-theoretical duality between *Capital I* and *Capital III* is eliminated (Table 8.2 in § 2.3 shows the crux of this duality). Therefore, output transformation or input transformation is also redundant (briefly discussed in § 4.5).

In other words, we have continuity of the concept of value for each of *Capital's* levels of abstraction. This continuity *includes* all specific and concrete market phenomena in terms of balanced or imbalanced market prices (*Capital II*, Part Three and *Capital III* Part One). However, it *excludes* 'prices of production' and hence dual account systems.

Generally speaking, the systematic insufficiency, or incompleteness, of Marx's 1864/65 draft is that he moves to a consideration of sectoral differences without having concretised his 'Capital I' account of *social average* production into sectors of production. Thus he skips a step, and is so bound to phrase the matter immediately (i.e. non-mediated) in terms of market supply phenomena.

Hence the (potential) conceptual progress, or concretisation, of *Capital III*, Part Two concerns, first, the explicit introduction of a general (i.e. average) rate of profit, and second, abandoning the *Capital I* production averages, so that we have differentiated sectors of production. That is also Marx's aim. In particular, this concretisation moves from the explanation of the social average surplus-value produced (*Capital I*) to the explanation of the sectors' *production* of surplus-value. In a way, this is formally in line with Marx, be it that in the 1864/65 manuscript he *implicitly* posits that this matter requires no concretisation: rates of surplus-value tend to equalise between sectors.

The concretisation also includes the explicit introduction of the composition of capital (c/v) – which was mostly only implicit in Part Four of *Capital I* (see § 3.1 point 4).

With regard to details of the reconstruction (see § 4.3) I add a terminological point here. Just as Marx did *at the start* of the GRP manuscript, I treat surplus-value as still being identical to profit, because the distribution of surplus-value to financiers has not yet been developed. However, because the reconstruction makes the GRP transformation redundant, surplus-value keeps on being identical to profit (that is, prior to the explicit introduction of finance).

4.3 *Analytics of Technical Change Associated with Increasing Productive Forces*

I now set out a brief point-by-point presentation of the main elements of the reconstruction. Generally, there are three possibilities regarding the combination of increasing productive forces (PF) and of the organic composition of capital (CC): first, a constant CC; second, an increasing CC; third, a decreasing CC. I consider each of these in turn.

1 The Productive Forces of a Sector Increase along with a Constant CC

If the PF rise while the CC is constant, the change is without costs. I suppose that this is what Marx generally had in mind in *Capital I*, Parts Four and Five. In this case, we have – after competitive adaptation – *a pure decrease in the value of commodities and so an increase in relative surplus-value* (that is, to the extent that the commodity at hand makes part of the wage bundle).

Upon introduction of the new technique, the initiator makes an extra surplus-value due to the increased value-generating potencies of labour, that is, at a constant market price. Along with it, the initiator's rate of profit rises above the average.

$$(1) \quad \text{PF}\uparrow, \text{CC constant} \rightarrow s'_I\uparrow \text{ and } r'_I > r'_s = r'_E$$

(From here on I use the following notation: s = surplus-value; s' = rate of surplus-value; r' = rate of profit; subscripts: I = initiator; s = sector; E = economy.)

Competitors follow suit, and because of the above-average rate of profit there will also be an extra investment (by the initiator, competitors or entrants) which forces the market price downward.⁶¹ This price decrease devalues the initial extra value-generating potency of labour. I call this a 'devaluation', because an increased value-generating potency results in fact in a revaluation.

61 I draw a distinction between *production-process competition* and *market competition*. Only additional supply of the commodity at hand (predicated on extra investment) will ceteris paribus lower the market price. The above-average rate of profit (predicated on the production-process competition) induces this extra investment, and hence this market competition. In case the new technique requires an increase in scale, we would have already upon its initiation an extra investment and an additional supply, and some downward pressure on the market price. This qualification also applies for the next two

(2) **competition** $\rightarrow p \downarrow \rightarrow s'_i = s'_s = s'_e$ (result of devaluation) and $r'_i = r'_s = r'_e$

The result is a normal, and ultimately generalised, increase in relative surplus-value; that is, to the extent that the commodity at hand makes, directly or indirectly, part of the wage bundle.

(3) $p \downarrow$ (relative surplus-value \uparrow) \rightarrow **generalised $s' \uparrow$ and $r' \uparrow$**

This part of the concretisation is directly in line with Marx's *Capital I* Part Five (moreover, there is no problem of different CC's.)

2 The Sector's Productive Forces Increase along with the CC Increasing

In the second case the PF increase in a sector along with a rise in CC. *A capitalist introduces a CC-raising technique only if this raises the rate of surplus-value such that the rate of profit rises as a result* (or remains at least constant). Thus the expectation of a rise in the rate of surplus-value is a condition for a rising CC. This is a very simple point, but a key one for the whole discussion.⁶²

2-a. For analytical reasons, I start by considering the period before any competitor has adopted the new technique; along with it I assume *constant* market prices.⁶³

Upon the introduction of the CC-raising technique (as predicated on increasing PF), the initiator obtains an extra surplus-value due to the increased potencies of labour (this is in line with Marx 1867).⁶⁴ Along with it, the initiator's rate of profit moves above the average.

cases. (I disregard any market-strategic pricing considerations, which would belong at a more concrete level of the exposition.)

62 Within any other theoretical constellation – (including the ones that I contest) and in whatever way profits are explained – an expected rise in profits such that the rate of profit remains at least constant is also a condition.

63 In order to keep the presentation concise, I will disregard for this and the next point, any market-strategic considerations for gaining an increased market share. These are relevant for a further concretisation, although they do not inherently pertain to changes in productive forces, because 'market share competition' – e.g. a (temporary) price-decreasing one – might occur independently of it.

64 Thus the aggregate surplus-value increases. This is not different for Marx's presentation in *Capital I*, Chapter 10^{Eng.12} (§ 3.2 above).

$$(4) \quad PF \uparrow, CC \uparrow \rightarrow s'_i \uparrow \text{ and } r'_i > r'_s = r'_E$$

Because of constant market prices, the increase in PF has no effect on the relative surplus-value. In fact, the absolute surplus-value increases without an increase in the length of the working day.⁶⁵ I call this '*compressed absolute surplus-value*'.

2-b. I now drop the assumption of a constant market price, and consider effective production-process competition. Again, for the initiator we have:

$$(5)=(4) \quad PF \uparrow, CC \uparrow \rightarrow s'_i \uparrow \text{ and } r'_i > r'_s = r'_E$$

Now competitors follow suit, and extra investment (by the initiator, competitors or entrants) forces the market price down, thereby devaluing *some* of the initial extra value-generating potency of labour.

Extra investment (and price decrease) continues up to roughly the point where the sector rate of profit (r_s) is averaged out. Given the increase in CC , this averaging-out of the sector's rate of profit will be reached at a point where the sector *rate of surplus-value* is higher than the economy average rate ($s'_s > s'_E$); hence, the value-potency of labour is devalued up to that point. Thus the extra value-potency of labour will not completely vanish, since there is no capitalist motive or force or mechanism for any further price decrease which would push the rate of profit below the average.

$$(6) \quad \text{competition} \rightarrow p \downarrow \rightarrow s'_i = s'_s > s'_E \text{ (result of partial devaluation) and } r'_i = r'_s = r'_E$$

The result is a *combination* of, first, an *increase in the 'compressed absolute surplus-value'* for this sector (due to the lasting increase in labour potency for this sector) and, second, an economy-wide *increase in relative surplus-value* (to the extent that the price decrease affects the wage bundle).

Sector effect:

$$(7a) \quad p \downarrow \rightarrow s'_i = s'_s > s'_E \text{ (partial devaluation) and } r'_i = r'_s = r'_E$$

65 The qualification about this type of absolute surplus-value was pointed out by Chris Arthur in the conference discussion, based on an earlier version of this paper.

Economy-wide effect (as including on the sector at hand):

$$(7b) \quad p \downarrow (\text{restricted relative } s \uparrow) \rightarrow \text{generalised } s' \uparrow \text{ and } r' \uparrow (\text{at } r'_1 = r'_s = r'_E)$$

Recall from § 3.2, that such changes and divergences in the rate of surplus-value between sectors are in line with Marx's 1867 Part Four exposition. However, at that point in the 1867 exposition, he has the CC and the rate of profit implicit; we now have made these explicit, so concretising the exposition at a 'Capital III' level. Marx probably assumed that the 'compressed absolute surplus-value', i.e. the increased potency of labour, would vanish (see the third citation in § 3.2), because he implicitly held the CC unchanged. In that case, we have the constellation set out under point 1 above.

3 The Sector's Productive Forces Increase along with the CC Decreasing

The case of an increase in PF along with a decrease in the CC has effects similar to case 1 (although now CC's diverge across the economy).

The initiator's introduction of a new technique:

$$(8) \quad PF \uparrow, CC \downarrow \rightarrow s'_1 \uparrow \text{ and } r'_1 > r'_s = r'_E$$

Competition and extra investment:

$$(9) \quad \text{competition} \rightarrow p \downarrow \rightarrow s'_1 = s'_s < s'_E (\text{result of devaluation}) \text{ and } r'_1 = r'_s = r'_E$$

Now the equalisation of the rate of profit is reached at a sector rate of surplus-value below the average one ($s'_s < s'_E$).

To the extent that the lower sector price affects the wage bundle, we have a generalised increase in relative surplus-value, and hence a generalised increase in the rate of profit.

$$(10) \quad p \downarrow (\text{relative surplus-value} \uparrow) \rightarrow \text{generalised } s' \uparrow \text{ and } r' \uparrow$$

4.4 Continuous 'Compression of Absolute Surplus-Value'

I now briefly return to the second case (increase in PF, along with a rising CC). The concept of a continuous 'compression of absolute surplus-value' predicated on increasing labour potency is, *qua principle*, analogous to Marx's concept of the 'density' of labour as related to its intensity (see § 3.3). More precisely the latter is a 'density of absolute surplus-value' because it occurs equally within the same absolute amount of clock-time. Each of these raise the rate of surplus-value. The difference between the two concepts is as follows.

First, states of different densities of labour tend to be levelled out over the economy, that is, to the extent that competition between workers is effective in this respect. However, it is inherent in the productive forces that a *technology* is applied as a specific *technique* within one sector.⁶⁶ The latter usually cannot be generalised across the whole economy (as indicated in 3§2 Marx equally did not posit this). However, some technologies (think of the steam engine, or the contemporary IT and ICT) can gradually be widely dispersed in the form of a wide range of techniques. To the extent that this happens (in either one of the CC affecting cases 2 or 3), the value-potency of labour tends to be generalised. (Though, note again that ultimately the particular technique is CC relevant. In the unlikely case of a complete generalisation, we would ‘merely’ have a generalised increase in relative surplus-value, hence an increase in the concomitant rate of surplus-value.)

Second, Marx (1867) pointed out in detail the human-physical limits for increases in the intensity of labour. By implication these are limits to what I have called the ‘density of absolute surplus-value’. However, the capitalist drive for profit, and hence for the highest rate of profit, means that the value-potency-related ‘compression of absolute surplus-value’ is in principle unlimited – as a result of which *technology* has increasingly taken on the value-form.⁶⁷ Diverging sectoral value-generating potencies of labour are predicated on the degree of diffusion of the productive forces of labour, that is on the degree of diffusion of technology into sectoral applied techniques. However, independently of the degree of diffusion, technology and techniques are themselves the product of social labour. Hence labour is not only the source of surplus-value generally, but in particular also the source of the compression of absolute surplus-value.

4.5 *From a Dual to a Single Account System*

The upshot of the reconstruction is that the value-theoretical duality between *Capital I* and *Capital III* is eliminated (as indicated, Table 8.2 in §2.3 shows the crux of this duality). Hence, any output transformation or input transformation is redundant. Hence redundancy also applies for any aggregate equality condition between the contested dual systems (in the post-Marx analytical criticism,

66 I make a distinction between ‘technology’ (knowledge about and search for potential techniques) and ‘technique’ (the particular application of technology in production). It is akin to Schumpeter’s (1934) and Freeman’s (1982) distinction between ‘invention’ and ‘innovation’ (see Reuten and Williams 1989, p. 80 and pp. 119–21).

67 Reuten and Williams 1989, p. 80.

input transformation enters because of Marx's defective claim that in his dual system, we would have the aggregate equality of surplus-value and profit as well as of value and prices of production). In the reconstruction, we have one single set of dimensions (or one single set of measures), namely monetary value and complex labour-time – recall from § 3.5 that Marx introduces such complexity already in *Capital I*, Chapter 1. We 'merely' move from the *Capital I* averages to the *Capital III* sectoral divergences. Moreover, instead of a comparative static account, we have a dynamic account.⁶⁸

4.6 *Conclusions: Implications of the Reconstruction*

The reconstruction strengthens Marx's explanation of surplus-value. The central idea is the diverging value-generating potencies of labour between sectors, associated with diverging states of the productive forces between sectors. There are five implications:

1. Contrary to the 1864/65 GRP manuscript, we have no transformation, no dual account systems, and no artificial value and surplus-value 'adjustments' that would question the status of the *Capital I* determinations.
2. The reconstruction maintains the monetary value account – established in *Capital I* – throughout the terrains of each of the levels of abstraction of the three volumes of *Capital*, as including the exposition of all specific and concrete market phenomena in terms of balanced or imbalanced market prices. Again, it merely excludes prices of production and hence the implied account duality.
3. The reconstruction does not affect the determination of average surplus-value by the average exploitation of labour as set out in *Capital I*.
4. Given the real wage, the length of the working day (or year) and the intensity of labour, the production of surplus-value in each one sector is determined by the value-generating potencies of labour. Sectoral divergences of the latter are predicated on the degree of diffusion of the productive forces of labour. In other words, these are predicated on the degree of diffusion of technology into techniques applied in each sector – technology and techniques themselves being the product of social labour.

68 Marx's GRP transformation posits a 'state' of diverging capital compositions together with surplus-value 'adjustments' without sufficiently arguing how such a 'state', or any next state, could come about – thus, how capital composition raising techniques could ever come about. Dynamically considered, increases in the composition of capital in some sectors come about *because* an increasing rate of surplus-value is their condition (§ 4.3, case 2).

5. Along with the 'compression of absolute surplus-value', the 'productive forces' component of surplus-value and the rate of surplus-value has explanatory power. However (and as far as I can see now) it can be measured only indirectly (this is a defect, even if it also applies to many accepted theories in the social and natural sciences).⁶⁹

Summary and Conclusions

I revisited what probably is the main problem with Marx's *Capital*, namely the concretising transformation of the *Capital I* value concepts into the prices of production of *Capital III*, Part Two – dubbed the 'transformation problem'. As a quantitative transformation, it posits dual account systems. In what became Part Two of *Capital III*, and in the 1864/65 research manuscript for it, Marx set out five constraining incompatible presuppositions for that transformation (§ 2.1). Key presuppositions are the sale of commodities 'at their values' and equalised rates of surplus-value. To get rid of the incompatibility of presuppositions, Marx then abandons the first one (§ 2.2), although he is loath to do so, because of its severe implications for his (draft stage) *Capital I* exposition (§ 2.3).

In the 120-year history of the appraisal of that transformation, the main focus has been on the analytical shortcomings of *that* transformation (shortcomings which I do not question, given the way it was posited). That appraisal leaves the constraints as finally posited by Marx untouched. In this article, I have set out a Marx-immanent critique of his positing of these constraints, and especially the presupposition of equalised rates of surplus-value. To achieve this, I scrutinised Marx's exposition of surplus-value and the rate of surplus-value in *Capital I* – especially Parts Four and Five – an exposition which I accept. In brief, given a real wage, the rate of surplus-value is determined by (1) the length of the working day; (2) the intensity of labour; and (3) the productive

69 Finally, I mention that the reconstruction might have repercussions for *the presentation* of the 'tendency of the rate of profit to fall' of *Capital III*, Part Three (I prefer to call it the 'rate of profit cycle' – see the discussion of the manuscript in Reuten 2004). Note that it is formulated at the aggregate (or average) level, as a result of which diverging rates of surplus-value in different sectors play no role. The formulation of the theory in terms of a rising composition of capital in the upturn (instead of a more general over-accumulation of capital), would require a more complicated argument than the one we find in the current text of that Part Three (however, that theory needs to be concretised anyway).

force of labour. Changes in each of these three can arise either separately or in various combinations. In these Parts, Marx presents these in terms of social averages and their changes (§ 3).

Key to the defect of Marx's 1864/65 transformation is its disregard of the development of the productive forces of labour that is presented in the 1866/67 thoroughly-reworked version of *Capital I*. In the latter we find that while there are mechanisms for the equalisation of wages between sectors, the working day, and the intensity of labour, there is no mechanism for the equalisation of the productive forces between sectors. Marx justifiably does not posit the latter (§ 3.2). In particular, he does not posit an equalisation of the composition of capitals. Confronted by the transformation problem, the heart of the matter turns out to be that Marx's *Capital I* (rightfully) associates diverging productive forces of labour with diverging *value-generating potencies* of labour (§ 3.2).

In the reconstruction which I set out in § 4, I carry over these *Capital I* notions to the level of concretisation in 'Capital III'. The transformation (and its problem) is then transcended into a concretisation of the averages account of *Capital I*, especially with regard to divergences between sectors in their productive forces, and the concomitant value-generating potencies of labour. Because of these divergences, we have divergent rates of surplus-value. This concretisation is consistent with diverging composition of capitals and equalising or equalised rates of profit. Thus, the transformation of the *Capital I* concept of value into 'prices of production' becomes redundant. The result is a continuity of the concept of value for each of *Capital's* levels of abstraction. This conceptual continuity *includes* all specific and concrete market phenomena in terms of balanced or imbalanced market prices. It *excludes* 'prices of production' and hence dual account systems.

With *Capital I* in retrospect, and equipped with the reconstruction, we can see that Marx's 1864/65 GRP constraints posit the matter in a static way: we have divergent sectoral compositions of capital. However, dynamically considered, we have diverging compositions of capital *because* diverging rates of surplus-value are their condition.

Appendix: George Stiebeling (1890) and Julius Wolf (1891) on Differences in Rates of Surplus-Value

Equalised rates of surplus-value between sectors are key to the way in which Marx posits the GRP transformation problematic in his 1864/65 research manuscript. Whereas one can suppose that the ‘intensity of labour’ aspect of the rate of surplus-value may be levelled out in competition among workers, no mechanism exists for the levelling out of its aspect that has to do with the ‘productive forces’. Marx is aware of this in *Capital I* (1867), but (still) neglects it when he sets out the GRP transformation. I indicated in § 4.1 that, as far as I am aware, this position of Marx has not been questioned in the main debates on the transformation problem. However, prior to the publication of *Capital III* (1894), two participants in Engels’s (1885) ‘prize essay contest’ showed the right intuition about the connection between sectoral productive forces and rates of surplus-value, be it in rather general terms. The contributions of these two, Stiebeling (1890) and Wolf (1891), are briefly discussed below. I will not discuss Engels’s (1894) inapt ridiculing of these contributions in his Preface to *Capital III*. The sad story behind it is narrated by Vollgraf and Roth (2003b, pp. 482–6 and 489; see also their 2003a, pp. 399–400).

George Stiebeling, ‘Das Werthgesetz und die Profit-Rate’ (1890)

Stiebeling’s essay appeared as a booklet (vi + 35 + 3 pages) after he had tried to get it published in *Die Neue Zeit* (edited by Karl Kautsky).⁷⁰ Stiebeling, like Wolf, was of course ignorant about what all post-1894 commentators know about how Marx posited not only the GRP problematic, but also the movement from the rate of surplus-value to the rate of profit (*Capital III*, Part One). Stiebeling (therefore) starts his essay with the latter movement (pp. 1–10), mainly by way of a running numerical example (he is even worse than Marx in choosing numerically awkward examples). His solution to the problem posited by Engels (1885) follows on pp. 11–21. Next, he has an addendum in which he applies his views to the accumulation of capital between 1870/71 and 1880/81 in the USA and England. Using census data for these countries, he estimates their (changes in) rates of surplus-value and rates of profit for these years (pp. 22–35).⁷¹

70 See Stiebeling’s Preface. See also Vollgraf and Roth 2003b, p. 484.

71 It is beyond the scope of this paper and appendix to comment on this interesting part of Stiebeling’s essay. Howard and King (1989, p. 29) remark that Stiebeling’s was ‘almost certainly the first systematic use of statistical sources in Marxian value theory’ (their reference is probably – also – to Stiebeling 1894, which is a 28-page cross-section analysis of the year 1880 for the US economy).

Stiebeling's solution consists of diverging/changing⁷² rates of surplus-value associated with a diverging/changing 'productive force of living labour' (*Produktionskraft der lebendige Arbeit*), along with divergences/changes in constant capital (p. 12).⁷³ He posits these as an assertion, offering hardly any argument. He does not refer to Marx's *Capital I* exposition of surplus-value and the productive forces of labour. Explicitly at least, he neglects the distinction between the 'use-value productivity' and the 'value-productivity' of labour, and thus he neglects relative surplus-value. Unfortunately he also does not address the relevant competitive processes that would result after changes in the productive forces.

Generally, I consider Stiebeling's essay theoretically defective (quite apart from a somewhat clumsy presentation), but he nevertheless shows the right intuition about the key role for the productive forces. Throughout he equates (correctly in my view) the mass of surplus-value and the mass of profit at the micro level (that is, profit before any distribution such as to financiers) – labour being the unique source (*Quelle*) of surplus-value. Because of this equality at the micro level, he posits no surplus-value 'adjustments' between sectors of production.⁷⁴

Howard and King (1989, p. 29) comment about the approach that Stiebeling adopts that: 'The problem is, of course, that these are price rather than value magnitudes. Stiebeling's implicit assumption that individual prices and values are equal [this is correct] reveals a basic misunderstanding of the entire problem. His calculations for an equilibrium situation are true by definition: Stiebeling does not solve the transformation problem, he abolishes it'.

This is a strange comment. At the point where Stiebeling starts (i.e. prior to the publication of *Capital III* in 1894) there is no tension between value and prices in Marxian theory, at least not one relevant for the current problematic. So how can this be 'a basic misunderstanding of the entire problem'? The Marx of 1864/65 made the distinction between 'values' and 'prices of production'. This does not imply that an attempted solution which does not make that dis-

72 He is often not clear about 'divergences between sectors' and 'changes within a sector'.

73 He does not explicitly use the term 'composition of capital'. Throughout his essay, Stiebeling seems to be aware that differing turnover times of capital posit the same problematic as differing ratios of constant and variable capital.

74 He of course does not use the – at the time non-existent – terms micro or macro, nor would he have required them, because in his account the micro equality implies macro equality. He can posit the micro equality because, in this part of his essay, he is – similar to Marx – not concerned with the distribution of surplus-value to financiers. However, he does take account of that in his empirical estimates.

tion is necessarily false, or would abolish the initial problem. In reference to § 4.5, Howard and King seem to presuppose that we inevitably must have dual account systems. (I do not want to criticise Howard and King especially; I regard them as representatives of a particular value-theoretical mindset, and I only comment on them because they discuss Stiebeling's work.)

Julius Wolf, 'Das Rätsel der Durchschnittsproftrate bei Marx' (1891)

Julius Wolf's contribution in 16 pages appears in 1891 in the *Jahrbücher für Nationalökonomie und Statistik*. Although Wolf goes into less detail than Stiebeling does, in terms of his numerical or algebraic examples, his essay is theoretically better substantiated than Stiebeling's. Like Stiebeling, Wolf shows in my opinion the right intuition about the key importance of changes in the productive forces in combination with the rate of surplus-value (esp. p. 356). He writes that Marx, unlike Classical Political Economy, distinguishes the productive forces of labour independently of the intensity of labour (p. 356). Quoting Marx from *Das Kapital* I, Part Seven, Chapter 23^{Eng.25}, he connects increasing labour productivity to an increasing capital composition (even if, I add, Marx does not use the term productive forces at that point).⁷⁵ Yet Wolf, like Marx most often, casts the matter of increasing productive forces in terms of labour's 'use-value productivity' increase (cheapening commodities) rather than a 'value productivity' increase (only the latter, as we have seen in the main text, is relevant for the transformation problematic). Wolf quotes Marx from Part Five (the extra value-generating potency of labour – in Part Four – seems to have escaped him). He seems to get somewhat lost in the notion of relative surplus-value, and an example that he provides on it (p. 360). Nevertheless, according to him, this should be the stepping stone to the solution of the problem. On page 361, he claims that 'the solution is not impossible', and that Marx might well present it, i.e. in the long awaited third volume of *Capital*. ('Die Lösung stellt sich also nicht als eine Unmöglichkeit heraus; bzw. Marx ist nicht genötigt, sich zu widersprechen, indem er sie bringt.') In fact, Wolf – as far as I can see – does not claim to have solved the problem. He rather claims to have provided the essential ingredients for the solution (that is what he writes on p. 362). From that page onwards, he expands on various related matters, such as what other writers – including Engels – said about it.

Generally, Wolf is very respectful to Marx (but he grumbles at Engels who, since 1885, had been promising time and again to publish the third volume 'within a few months'). Howard and King (1989, p. 30) comment: 'Like Stiebel-

75 Marx 1962 [1890⁴] pp. 650–5. (Wolf uses the third edition.)

ing, however, Wolf avoided the problem rather than solving it'. Again, Howard and King seem to take Marx's GRP presupposition about equalised rates of surplus-value, as well as the concomitant dual account systems, as indisputable.

Engels's (1894) comments about Stiebeling and Wolf in his Foreword to *Das Kapital III* are dismissive (to say the least). His attitude toward both men is disrespectful, rather than of the type 'that we have to solve a problem together'.

Comment on Geert Reuten

Christopher J. Arthur

Introduction

Geert Reuten's approach to Marx's transformation procedure is original, hence of great interest. He goes back behind the twentieth-century debate on it to interrogate, and find wanting, Marx's own presentation. This identification of a missing moment in the presentation remains true, whether or not Marx himself had doubts about his transformation, as is claimed by Reuten. But I do not comment on the very thorough textual scholarship characterising Reuten's paper. I limit myself to the substantive issues at stake. After considering some aspects of Reuten's approach, I address in my own way what Marx says about intensity of labour, and I end by defending a dual system approach to value theory, in opposition to Reuten.

Method¹

It is important to preface a more detailed discussion of the substantive issue with some reflections on method. More precisely, I underline the situating of Reuten's argument as a stage of presentational *concretisation*. There is a difference between conceptualising something in the empiricist one-to-one way, and the method of conceptual development. We do not move from concept to concept so much as present the process of the concept realising itself. Thus the process of concretisation is a matter of developing the concept from an overly abstract immediacy to a self-mediating actuality.

From the point of view of a systematic presentation, the movement from *Capital I* to *Capital III* is such a process of concretisation. In my opinion, it moves from the more abstract, hence less true, to the more concrete and complex, characterisable as a system of self-supporting truth. A form such as value is only truly known when what it has in it to become (self-valorising value in the first place) is exhibited. In *Capital III*, Marx very rightly refers to

1 For my exposition of the method of systematic dialectic, see my book: Arthur 2002a.

production price as a *transformed* form of value. This *new* form of value is in truth a more *concrete* form of value, because it is the outcome of systemic determinants, which Marx abstracts from in *Capital I*. It is still true that value is sourced from living labour, whatever the price rule. Yet, as Marx says, it denies its own origin in this transformed shape.

In my view, since value necessarily exists only as price, the transformation from one price to another should be considered as a development of value, from an overly abstract form to a more concrete one. It is not simply a matter of additional complexity, as when the law of motion is modified by friction, etc. Rather, the original positing of the form of value is less true than its developed shape embedded in the system of capitalist competition. So I claim that production price is not a distorted form of value, but the *finished form of value*, or at least a stage on the way to that, since value is fully determined only when the movement of capital itself has brought into play all its necessary moments, at the level of concretion of real capitals.

It is not merely a matter of expository strategy in moving from abstract to concrete, by adding further determinants to a simple model adequate in itself (if not to reality), a process motivated externally by the theorist's wish to exhibit the matter perspicuously, through first abstracting the general law from contingent perturbations. Rather, a dialectical system moves immanently, through rejecting the initial starting point as overly abstract in itself, and in need of grounding at a more concrete level. (For example, if the theorist abstracts commodity-value from the object before us, capital, and presents the relation between two commodities in these terms, promising to bring in later money, and capital, then the result is that there is no reason whatsoever to assume that two commodities exchange at value; this claim is too abstract to stand; it requires grounding precisely through its further determination in the movement of money and capital.)

A problem with Marx's exposition is that in order to exhibit his basic categories in *Capital I*, he takes a typical capital as the focus. What is occluded therewith is that, ontologically, capital is a *whole* that is *notionally* divided against itself as many capitals. So logically prior to the rewards for these many capitals are the determinations that generate the *whole* surplus-value then to be distributed to individual capitals according to systemic rules. (Note that in the relevant chapters of *Capital III* Marx speaks always of distribution, not of transfer.) Capital-in-general is not an abstract universal covering concept for free-standing capitals; it is actual in uniting and regulating them.²

2 Arthur 2002b and 2002c.

Reuten's Central Argument

In my view, Reuten's contribution shows us such a process of concretisation, as he establishes therewith the meaningfulness of the category of production price. This is all the more necessary, because it could be argued that Marx's transformation procedure does not develop immanently from so-called 'value' to so-called 'production price', but adds externally to the law of value, in its immediate form, the requirement of a uniform rate of profit in the face of different capital compositions. A counterfactual array of prices is manipulated abstractly so as to generate a coherent (if ideal) set of production prices. What Reuten achieves is a demonstration that the competition of capital works within the system to develop production prices. One might say that in his account, the need for a transformation procedure is finessed because the problem is already solved in the very moment of its arising, as production prices, and capital compositions, develop together. Difference and unity are co-determinate.

However, a controversial aspect of Reuten's solution to Marx's difficulties is that he presents it in such a manner as to reject entirely any so-called 'dual system' of measures (so-called 'labour values' and so-called 'production prices') in favour of a 'single system' of money measures in concrete movement. (Hence the famous 'conservations' are irrelevant.) I differ here, as I explain later.

I turn now to the detail of Reuten's discussion of *Capital* I. On a point of terminology, I speak of 'productive power' (singular) of labour, reserving 'productive forces' (plural) for the machinery, cooperation, skill, intensity, and so forth, that contribute to this power.

The central argument of Reuten's paper is that a sector with a higher productive power of labour generates value at a higher rate than would be the case if value simply reflected labour time, as if all labours created value at the same rate. It follows that in such sectors the rate of surplus-value is higher, even if, because of a concomitant increase in organic composition, the rate of profit is not. Hence Reuten rejects Marx's premise of equal rates of surplus-value; for there is no obvious mechanism whereby an increase in productive power in one industry is generalisable.

At a material level, an increase in the productive power of labour is registered in an increase in the output of use values per day. The point at issue here is, whether this simply means that the same value is spread over this greater mass of use value, or whether in some fashion a permanent increase in value arises from labour of a higher power than before. If, as Reuten argues, it may, then such labour of a higher value-generating power cannot, it seems, be measured in clock time. This is a key claim, clearly. For Reuten puts in question

orthodox value theory, in which the magnitude of value correlates with time measured by the clock. He argues convincingly that, although the innovating capitalist loses much of his advantage, as competitors in the same sector imitate the new productive force, there can be no such process of imitation that is effective across sectors. Rather, what happens, he suggests, is that, in the case where the increased productive power of labour is not costless, but is linked to a higher capital composition, then a new general rate of profit ensues, which retains within its generality a higher rate of surplus-value in the innovative sector. Even if the average rate of surplus-value increases, through the generation of relative surplus-value, the traditional sectors are penalised through a lower than average rate for failing to potentiate social labour. But it is important to see that, since the potentiation of labour in the innovative sector generates more value than average during a constant working day, necessary labour is thus *compressed*. This is not because the value of labour power falls; so the extra surplus-value is a form of *absolute* surplus-value.

Reuten argues that the rate of surplus-value varies between sectors permanently. This point chimes with something that has always intrigued me, namely that little notice is taken in the literature of the fact that, as a consequence of the transformation in value from the 'simple prices' of *Capital I* to the 'production prices' of *Capital III*, just such inequalities emerge even in Marx's own presentation. Marx argues from an impossible situation (adumbrated in Reuten's points A–E) to one that may never obtain empirically, but which, nonetheless, tendentially finesses the original problem. In the first situation, he assumes there are equal rates of surplus-value, and consequently unequal rates of profit. In the second situation, there are equal rates of profit, and, I argue, correspondingly unequal rates of surplus-value. Applying the rule of a uniform rate of profit to generate production prices yields the result that there are now *unequal* rates of surplus-value, in money terms. Thus, in Reuten's Table 8.1, the rate of surplus-value changes from 100 percent in every case beforehand, to 20/30, 20/20, and 20/10, after the 'transfer'. (All these terms are in *monetary* dimensions; Reuten correctly underlines the point that value is a monetary variable. It is true that this monetary revaluation of the exploitation of labour maintains untouched what may be called the *physical rate*, namely the labour-time 'embodied' in the surplus product compared with that 'embodied' in the real wage. I return to this in my last section.) So labour-intensive industries end up with a low rate of surplus-value, and labour-saving sectors a high rate of surplus-value.

In Reuten's paper, it is said that Marx drops the assumption of sales at value. Reuten prefers to retain this, and to drop Marx's assumption of equal rates of surplus-value. But as I have just pointed out, Marx implicitly drops equal

rates of surplus-value also. It is not strictly true, therefore, that the premise of equal rates of surplus-value is maintained throughout Marx's transformation procedure. I believe this is the main thing that worried him; for he was still at that time influenced by the embodied labour reading of value to some extent. Given this reading, the same *physical* rate of exploitation necessarily expressed itself in the same *value* rate. So how could exchange at production prices ever occur if price is simply the expression of labour time? Moreover it seems that, since it is a premise of the problem that the same physical configuration is maintained across the transformation, the rate of exploitation cannot change. Yet, in money terms, which Marx knows is the only real existence of exchange at value, it has! This is not merely an analytical problem but a conceptual one, for it touches on the very nature of value and surplus-value.

The merit of Reuten's approach is that inequality in rates of surplus-value is derived, not as a consequence of the existence of differing capital compositions, but as their very premise. Thus he reaches dynamically the same result that Marx exhibits statically.

I now would like to add that this result may be illuminated by taking up the category of time and relativising clock time. If value arises only during the time of labour, it seems now that some times must count for more, even though the workers on the shop-floor of different factories do not notice this consequence of differently potentiated labours.

This has an intriguing analogy in the time paradoxes of relativity theory. Processes have a homogeneous time dimension only relative to an inertial frame of reference. If a spaceship leaves earth at a high speed, the time taken to boil an egg in the spaceship will take the usual three or four minutes to the cook; but to an observer located on the earth it will take longer. It counts for more, so to speak, because time is dilated, so an hour on a moving spaceship equates to many hours on earth.

By analogy, the time of production is not absolute; it is always measured in the context of a common frame of reference. The comparison of the different frames of reference for productive activity, predicated on different organic compositions of capital, means that labour time in capital-intensive industries is dilated relative to average and *counts for more*, while, conversely, labour time in labour-intensive industries *counts for less*.³

I stress that these relative weights are *social determinations*; the workers involved *experience* their labours in the same way because their frame of reference is the factory. Time on the factory floor seems unchanged to these workers,

3 I first made this point in Arthur 2005, p. 122.

but in the more productive sector there is 'time dilation' in that an hour 'counts' as more than an hour from the point of view of the fixation of time in value; *relative* to the backward sectors that have failed to potentiate labour, each hour in the advanced sector generates more value.

I turn now to what I call the 'double duty' of productive labour, which in my opinion casts fresh light on the assumption of a uniform profit rate and the distribution of surplus-value according to the size of capitals.

So-called 'constant' capital is treated far too casually, when deriving the value of a commodity, if it is said the value of the constant capital is simply carried forward to reappear in the value of a commodity. But it is not. It is totally destroyed during the production process. The capitalist has undertaken an enormous risk in sacrificing all his capital in this way. His constant capital is all productively consumed. He can only pray that if his commodity is sold, and sold at the right price, his capital is *resurrected* in new material shape. When we look at capitalist production we find that *two* important things go on during the valorisation process: as we know, new value is *created*, but as importantly, and as a condition of that, the original capital value is *recreated*; it must be resurrected in a reflux from its destruction. Thus living labour does 'double duty', since it is not pure activity but work *on* materials *with* instruments of production, both getting used up. It both generates new value, and, *also*, resurrects in a new material shape the value of constant capital. That ability to transform inputs into outputs such that their value is resurrected really *is* an intensive dimension of labour's value-generating power, according to the size of the constant capital carried forward through its productive consumption to the final commodity. The productive power of labour *includes* its power of shifting constant capital to the final product such that it is renewed rather than lost along with its consumption.⁴ Hence, in the process of value-determination, labour may rightly be regarded, in a way, as the source of *all* the value embodied in a commodity.

If a firm turns over more social capital per hour than average, it must be rewarded accordingly, even if this changes its rate of surplus-value. It turns over with greater *momentum*, so to speak. I conclude that the new rate is in accordance with the concept of capital. Competition merely realises more or less adequately the demands of the concept. Accumulation, as the life cycle of capital, is a *growing body* of wealth, not a mechanical addition of dead value to dead value.

4 I first made this point in Arthur 2005, p. 121.

Production may be organised *within* a branch of production efficiently, yet in this one respect differ *between* branches, namely in the mass of constant capital set in motion by labour and its effectivity at resurrecting constant capital. This underpins the formation of prices of production, co-determined by the general rate of profit.

Putting this same point in the larger context of system-wide growth, we see that total social capital grows only if each complementary fraction of it grows. In my view, the distribution of surplus-value is predicated on the claim that each fraction has recreated capital anew in its own sphere, and requires a reward in proportion to that success.

Those branches which are more labour intensive have 'wasted' labour, so to speak, just as much as those less efficient firms within a branch, because they effectively use social capital less productively than others.

A Note on the Intensity of Labour

In *Capital I* Marx claims that, beside time, intensity also determines the magnitude of value created.⁵ Moreover he also thought that changes in the intensity of labour are generalised across the economy through competition between labourers. I doubt this latter point, but in any case I regard intensity as utterly irrelevant to the determination of value magnitudes.

Remember *workers* do not commensurate their labours. It is *capitals* that commensurate, and the only thing they care about is the *time* it takes to produce and market a commodity. Intensity is not relevant as an *additional* factor of which account must be taken. It is relevant *only* insofar as it reduces the time embodied in each item because more are produced per hour. There is no need at all to try to commensurate intensity across sectors. Moreover I find the whole notion incomprehensible. How can the intensity of working on a factory line be compared with the intensity of computer programming? Concrete difference overwhelms any abstraction here. In sum, there is no way of assessing the degree of intensity in a given sector except by reference to its effect on the time taken per unit of output; no 'intensive magnitudes of

5 Sadly, Marx's view may be attributable to an 'embodied labour' approach, in which all the 'effort' of labour must be seen as embodied in the product; he was influenced by the new science of physiology, which considered labour as a machine-like activity. In physics, the 'work' done is a function of 'power' and 'time'. Insert 'labour' before each variable, and there is a labour theory of value!

labour' are in reality compared across sectors; only time is compared. Of course, within the *same* sector, intensities may well be comparable. Every capital tries to reduce the time taken per unit of output, and one way of doing this is by increasing the intensity of labour, but when the others in the sector catch up the effect cancels out, price per unit drops, and the rate of surplus-value in money terms remains the same. There is no need to worry about whether or not intensity can be generalised *across* sectors, because capital takes no account of it, it being already 'taken care of' in its effects on time.

So far in this section, I have been assuming a 'pure case' in which the capital composition stays the same, for example, weeding, fruit picking, and so on, in which the increase of the intensity of labour is costless. However, there are many cases in which this is not so; for example, a worker previously attending one machine is now required to look after two at once, evidently a more onerous task. There is a corresponding reduction in the labour time to produce each unit of output. Moreover the capital composition is increased. So we find here the same result that Reuten argued for in treating the introduction of more powerful machinery, namely that, if the capital composition in the sector is higher than average, the rate of surplus-value must be higher in order to get the general rate of profit. This case is different, however, because here it is not that better machinery potentiates labour but that the same machinery is potentiated by the extra effort brought to bear by labour, each machine now absorbs less labour-time in operation. The new working day is 'denser', as Marx would put it. And, in this sort of case, the rate of surplus-value in the sector remains higher than average.

We see then there are three important paradigm cases:

- a) intensity remains the same, labour is potentiated by improved machinery, and if, as a consequence, the capital composition increases, the rate of surplus-value stays higher than average;
- b) intensity increases, without any change in the capital composition; now any advantage accruing to the innovator entirely disappears as it is competed away within the sector; cross sector comparison is irrelevant;
- c) intensity increases, together with an increase in capital composition because the existing machinery is thereby potentiated, and, just as in (a), the rate of surplus-value stays higher.

The Necessity for a Dual System Approach

Geert Reuten underlines that his is a single system approach. Because of this it makes no sense at any stage to refer back to some sort of 'labour values' to ascertain if conservation of aggregates is maintained. I disagree. First, let us notice that, even where Marx's aggregates are concerned, any transformation will change the general rate of surplus-value, because at production prices aggregate surplus-value and aggregate wages will normally differ from the same magnitudes as they were expressed in simple immediate prices.

Such mediated realisation of value, and surplus-value, does not mean that the measure of value in simple prices is irrelevant; it allows the proper measure of the exploitation of labour by capital, because it is nothing but the physical rate of exploitation expressed in virtual prices, albeit this moment is therewith abstracted out from the whole picture. Moreover, this rate is of great interest to both classes, and determined in the struggle at the point of production.⁶ Whatever the price rule actually in operation, this physical rate remains a crucial underlying variable.

It is not just a question of abstracting out an important variable for study, for this abstraction is rooted in the ontological duality characteristic of the capital system. On the one hand, we have the material side of the economic metabolism, of prime interest to workers; on the other we have the ideal side, predicated on the self-movement of abstraction, wherein capital re-conceptualises the material variables under its alien measures. Both material and ideal measures are equally valid. The consequence of this duality is that capital is ideally a hegemonic totality, yet also vulnerable because of its dependence on material factors such as the productive power of labour.

Reuten makes a good point, without noting its importance, when he says that the final determination of the rate of surplus-value is of no importance for the workers, and their own competition. It is 'capital's thing', so to speak, the outcome of capital's competition. Thus the working of the system must be appreciated from two class standpoints.

In my opinion, it is this ontological duality that leads Marx to talk vaguely of the difference between appearance, and some underlying reality. However,

6 When I refer to the labour-time ratio as 'physical exploitation' I simply follow capital's concern with time as it is present in the pure capital relation. However, from the workers' point of view, time may not be their only physical concern; for example, some miners have to endure 'wet-working'; this is surely experienced as more exploitative than usual, although time, and hence value, are unaffected; moreover, capital may well ignore any 'moral obligation' to pay compensation for it, pleading poverty.

this difference of analytical levels is much more radical, in that it comprehends a real inversion in conceptual terms. Precisely because the discrepancy is so marked, there is no conservation of magnitudes across the divide. Yet, because the concretisation of the abstract notions, through which capital comprehends itself, fails to preserve the material register of exploitation, this is no reason to neglect this fundamental material form. There is here a deeper truth, obscured by the measures capital takes to be real, namely, the truth of exploitation in all its rawness.

In considering this ontological duality, there is felt a tension between two methodological principles. We are surely concerned to identify, and analyse, the basic law of motion of a system, disregarding superficial perturbations; this might lead us to prioritise 'labour values' measured in simple prices. Yet, at the same time, since it is a basic principle of dialectic that truth pertains only to system, then such labour values, if taken as substantively valid, are nothing but a false concretisation, because the true concrete is the totality, of which every part is subject to systemic determination. From this second point of view, simple prices are, at best, purely virtual, illustrating a fundamental relation to be sure, but a relation (the capital relation) that has no real existence other than as co-determinant with others (the relation between capitals, for instance) that constitute the totality. To insist that *physical* exploitation (the ratio of labour time embodied in the surplus product to that embodied in the real wage) must be conserved in its *socially measured* shape is an abstract materialism that does not grasp the ideality of social form.

This last consideration is very powerful from the point of view of systematic dialectic. Yet it surely puts in question the fundamental Marxian theorem: that all value arises from the exploitation of labour. In my opinion this last can be supported only on ontological grounds, not on the claim that labour inputs are the best predictor of empirical prices, for instance. In my opinion, when distinguishing the worker's 'thing' from capital's 'thing', one is observing that the capital system is logically characterisable as a *contradiction in essence* because there is interpenetration of opposites; each side is reproduced by its other, and each tries to reduce otherness to its *own* other. Epochally, capital has imposed itself, subsuming labour to it, but, since the capital system is riven by contradiction, it remains vulnerable.

A final word here on concretisation. The transformation procedure concretises the original concepts of value and of surplus-value. But it is not the case that the value form in general concretises the *material* fact of exploitation. It is trivially true, that every mode of production has its specific mode of pumping out surplus labour. Conversely, we have not said much if we say that capitalism is obviously exploitative *without* investigating how this is effected through its

own specific relations. Yet the concept of exploitation, in order to be a reality, does not have to take any *specific* form, least of all must it be concretised in surplus-value. Here the ordinary empiricist concepts serve well enough. There is the common core to 'exploitation', and there are its specific inflections. This point remains, even if we come to see that appearances may be misleading: for example it appears that all the slave's labour is stolen, while in wage-work it appears that none of it is.

Thus value is a historically determinate concept that has no basis in reality, unless it is situated (practically and theoretically) in its fully actual shape having been adequately concretised. So far from value being an ahistorical form distorted by capitalist relations, it is only within capitalism that value becomes a truth. The peculiarity of capital is that the source of value in *labour* is so hidden that it looks as if value is the reward for *capital's* toil and trouble. (How could it be otherwise if there is a pro rata reward for the whole of capital?) Value in its immediacy *denies itself* when realised as production price.

Nevertheless, once it is recognised that capital is a social form with ontological depth, categories holding at one level may be redefined, or even inverted, at another. Of course *Capital I* rigorously abstracts from all social determinations except those intrinsic to the capital relation itself. Such abstraction is not vicious if the necessary mediations are brought back in through the further presentation. Thus we may take value as the abstract social expression of the immediacy of material production, *and* at the same time say it does not hold unchanged at a more concrete level.

Conclusion

The transformation procedure is a problem left unfinished by Marx; indeed he was not even aware of it in its modern form. But Marx's project is not in principle an unfinishable one, so long as the theory is reconstructed to eliminate the Ricardian residue, and to bring to bear on the issue the dialectical approach which itself we owe to Marx.

Karl Marx's *Books of Crisis* and the Concept of Double Crisis: A Ricardian Legacy

Kenji Mori

1 The 1857 Economic Crisis and *Books of Crisis* (*Krisenhefte*)¹

Karl Marx's never-before published notebooks, the so-called *Books of Crisis*, are real-time documentation of the 1857 crisis, the first world economic crisis in history, collecting a voluminous amount of economic data from actual economic journalism. They have been published for the first time in *MEGA*², Part IV, Volume 14 (*MEGA*², IV/14 in the following). This paper, after characterising this document, aims to clarify a basic idea underlying the empirical research conducted by Marx there, in particular his concept of 'double crisis', and to trace the reception history of the idea back to its origin in Ricardo's analysis on machinery.

An economic crisis with its panics and bankruptcies began in the United States, reached England in October 1857 and spread from there to the whole of Europe. Because Marx had been hoping for the next crisis – and a subsequent resumption of revolutionary movement – ever since the 1847 economic crisis and the failed revolution in 1848, he heard with 'satisfaction'² the news about the outbreak of the crisis in England and the suspension of the Bank Act of 1844 at its climax. In this enthusiastic mood, he started two research projects.

I am working enormously, as a rule until 4 o'clock in the morning. I am engaged on a twofold task: 1. Elaborating the outlines of political economy ... 2. The present crisis. Apart from the articles for the Tribune, all I do is keep records of it, which, however, takes up a considerable amount of time. I think that, somewhere about the spring, we ought to do a pamphlet

1 The characterisation of *Books of Crisis* in this chapter is mostly based on my research conducted while editing *MEGA*², IV/14 and writing its Introduction (*Einführung*). About the details see *MEGA*² IV/14.

2 Marx to Engels, 8 December 1857 (*MEGA*² III/8, p. 209).

together about the affair as a reminder to the German public that we are still there as always, and always the same. I have started 3 large record books – England, Germany, France.³

He began by first writing the 'outlines of political economy (Grundzuege der Oekonomie)', which means the *Grundrisse*, as a theoretical work on the capitalistic economy, and second by conducting an empirical survey on the 'present crisis', i.e. the current crisis of 1857, whose results he was planning to publish in the form of a pamphlet in the following year.

The empirical survey on the current economic crisis mentioned above was carried out in the following manner. Marx excerpted articles and data from major newspapers and magazines such as *The Times*, *The Morning Star*, *The Standard*, *The Manchester Guardian*, *The Economist* and so on by transcribing and clipping. These excerpts were compiled and sorted out first thematically and then chronologically, in three notebooks. They cover countries such as France, Italy, Spain, the United Kingdom, Germany, Austria, the United States, China, India, Egypt, Australia and Brazil, and topics such as financial market data (security prices, discount rates, bank balance, efflux and influx of bullion etc.), commodity market data (prices and sales of agricultural and industrial products, import and export etc.), and bankruptcies, unemployment, short time, wages, labour disputes etc. These three notebooks comprehend a total of 191 manuscript pages, and contain more than 1,500 units of excerpts from 12 newspapers and magazines from the period between 7 November 1857 to 20 February 1858. The share of each source is shown in Figure 10.1.

It is possible to order the three notebooks according to the time of commencement of writing: the first notebook including 39 manuscript pages has the heading '1857 France' on the cover, the second and the third notebooks, including respectively 72 and 80 pages, have the headings 'Book of the Crisis of 1857' and 'The Book of the Commercial Crisis' respectively. The contents of the three notebooks are as shown in Table 10.1. The subjects of the second and third books mostly overlap with each other so that the latter can be considered to be the continuation of the former in 1858.

In each subject, the excerpts are ordered chronologically (though, understandably, with a few irregularities). As we can see at first sight, Marx tried to survey the occurrence quite systematically by considering not only the financial sector (money and credit) but also the real economy (production and

3 Marx to Engels, 18 December 1857 (MECW, vol. 40, p. 224; MEGA² III/8, p. 221).

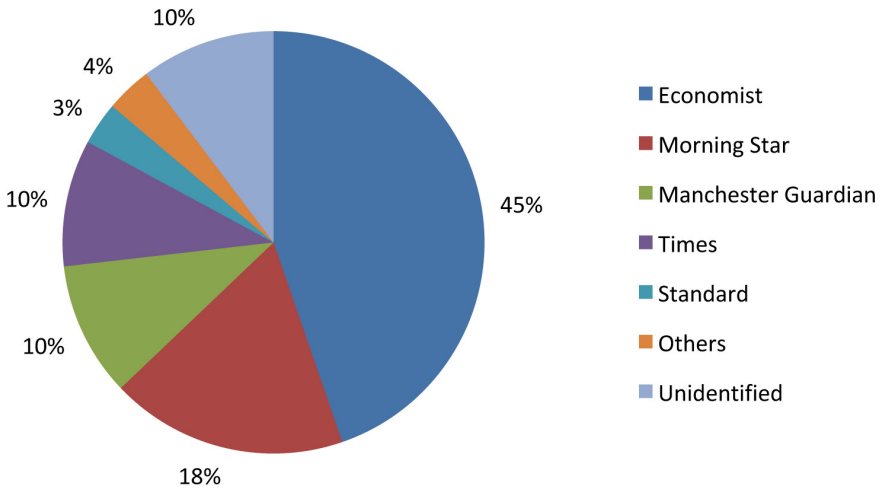


FIGURE 10.1 *Composition of excerpts*⁴

labour), and not only the British economy but also other relevant countries involved in the world market. These never-before published notebooks have been so far conventionally called '*Krisenhefte (Books of Crisis)*' and were published for the first time in *MEGA*² IV/14.

As can be seen from the features outlined above, *Books of Crisis* is Marx's documentation of crisis phenomena in a wide variety of markets in the period from November 1857 to February 1858. The main motivation for making the notebooks can be found in his intellectual need to empirically prove the hypotheses he had been advancing – concerning a coming next crisis – ever since the crisis of 1847. Soon after the 1847 economic crisis, Marx began to conduct sustained empirical research into actual economic developments in real time, and from time to time he published, based on the results of this research, his own crisis hypotheses, which appeared as journalistic articles in the *Neue Rheinische Zeitung*, *Neue Oder Zeitung* and *New York Daily Tribune* (abbreviated to NYDT in the following). The basic idea underlying these hypotheses was his concept of 'double crisis'.

4 The 'other' sources are as follows: *The Daily Telegraph*, *The Manchester Daily Examiner and Times*, *The Manchester Weekly Times*, *The Morning Herald*, *The Free Press*, *Reynolds's Newspaper* and *Weekly Dispatch*.

TABLE 10.1 *Contents of Books of Crisis*⁵

France 1857	Book of the Crisis of 1857	Book of the commercial Crisis
– 1857. France	Failures	1) Money market
– Crisis	Bank of England	1) Bank of England
– Bank of France	London money market	2) Bullion market
– French trade	i) General aspect of the money market	α) Efflux and influx of bullion
– Bank of France	ii) Bullion Market	β) Price and movement of silver
– French corn trade	a) Bullion in the Bank of England	γ) Foreign exchanges
– Ex- and imports	b) Export and import of precious metals	3) Loan market
– French trade	c) Price of silver	4) Failures
– Governmental Measures	d) Foreign exchanges Miscellaneous	5) Security market
– Italy	iii) Security market	α) Public funds
– Spain	a) Public funds	β) Share market
– Bourse quotations	b) Share market	ii) Produce market
– Traffic on the Rhine	1) Railways	1) Raw materials for textile fabrics
– French trade	2) Joint stock banks	α) Cotton
– Railways	3) Mining shares	β) Silk
– Northern Europe	iv) Produce market	γ) Wool
etc.	v) Industrial market	δ) Hemp and flax
– French bourse	vi) Hamburg, Northern Kingdoms, Prussia, Austria. (Germany.)	2) Metals
– French state revenue	[Board of Trade Returns] ⁶	3) Hides and leather
	ix) ⁷ United States	4) Mincing Lane
	i) Failures	5) Corn market
	ii) Money market	iii) Industrial market
	1) Bank of England	iv) Labour market
	2) London loan market	v) Miscellaneous
	3) Bullion market	1) Comparative statement
	a) Efflux and influx of bullion	2) Railway receipts
	b) Price of silver	
	c) Foreign exchanges	

5 The following table slightly abbreviates the contents (*Inhaltsverzeichnis*) of *MEGA*² IV/14 to reproduce the main structure of the notebooks more clearly.

6 The headings afterwards added by Marx.

7 The headings 'vii) France', 'viii) Rest of Europe (and Ust.)' and 'x) Australia and rest of the world' were cancelled afterwards by Marx.

TABLE 10.1 *Contents of Books of Crisis (cont.)*

France 1857	Book of the Crisis of 1857	Book of the commercial Crisis
	4) Security market	Crisis of 1857
	a) Consols	Financial condition of
	b) Railway – Joint stock bank – Mining shares	India
		Englische Staatseinnahmen
	III) Produce market	1857
	Raw materials for textile fabrics	Liverpool ship trade in 1857
	1) Cotton	China and India, Egypt etc.
	2) Silk	United States
	3) Wool	Crisis of 1857
	4) Hemp and flax	[The supply and
	Raw materials not for textile fabrics	consumption of wool]
	a) Metals	[The recent crisis]
	b) Hides and leather	Bank deposits
	c) Mincing Lane	The recent crisis
	d) Mark Lane	Australia et Colonies
	IV) Industrial market	Brazils
	Labour market	

2 Double Crisis Hypothesis

Marx was sure that the next crisis would be a ‘double crisis’,⁸ which means a simultaneous and interconnected occurrence of collapse in the *industrial market* and *produce market*, and which would be *caused by over-production* on the former and *under-production* on the latter (the ‘double crisis’ as such is defined as over-production on *both* markets). He took, however, two different views of the double crisis. In the first view, he used the terms industrial market and produce market to refer narrowly to (respectively) manufactured *consumption* goods and agricultural *provisions* (corn and colonial commodities

8 ‘This double crisis in England is being hastened and extended, and made more inflammable by the simultaneously impending convulsions on the Continent’. (*MECW*, vol. 10, p. 340; *MEGA*² 1/10, pp. 302–3); ‘... the phenomena of this double crisis, in the produce market and among the manufacturing classes, will by and by become more palpable ...’ (*MECW*, vol. 15, p. 411).

such as coffee, tea, sugar, tobacco etc.). Then, the interconnection of industrial crisis and agricultural crisis was understood in the following manner: high food prices reduce the demand for manufactured consumption goods because a larger part of consumers' income must be spent on food, due to its high price and the very low price elasticity of food demand. High food prices can be caused by either/both bad harvest or/and increasing consumption induced by rapidly extended production and employment in industry. This process, therefore, leads simultaneously to an under-production (excess demand) of agricultural products on the one hand and an over-production (excess supply) of industrial products on the other.⁹ This view concerning the interconnection of industrial and agricultural crisis can be characterised as a consumption-driven causality, i.e. in the sense that the supply of agricultural products cannot meet the *food* demand, and that the deterioration of profitability in the consumption goods industry is explained mainly by the lack of *sales*.

The shortness of the crop and increase in the price of provisions are no doubt causes which have counteracted and will counteract still more the demand for manufactured goods from those markets which are exposed to the operation of these causes, and among these the home market, the mainstay of British industry, stands in the first rank ... The demand for [manufactured] goods is decidedly falling off, while the supply increases every day. The largest and most numerous of the new industrial constructions are only now gradually coming into operation.¹⁰

In the other view of double crisis, Marx understood produce market to mean primary products in general, i.e., to include not only food but also *raw materials* such as raw cotton, raw silk, raw wool, flax, wood, hides, metal ore and so on. Then the interconnection of crisis on the industrial market and produce market was considered to be production-driven in the sense that extraordinary expansion of production in industry tends to cause not only excess supply (over-production) of industrial products but also excess demand (under-production) for raw materials, which respectively causes price decline of products on the one hand and price hikes of raw materials on the other. Declining price and increasing cost, i.e., the squeezing of the margin between price and cost, diminishes profitability in industry. The difference between the first and second view, each showing two variants, is summarised in Table 10.2.

9 A similar argument can be found also in Roscher 1861, pp. 295–6; Tooke and Newmarch 1857; Bagehot 1978, pp. 112–13.

10 *MEGA*² 1/12, pp. 345–6, words in parenthesis not in original.

TABLE 10.2 *Marx's two views on double crisis*

	First view		Second view	
Industrial market	consumption goods		consumption goods (textile)	production goods (machinery, railway)
Produce market	food (corn, colonial commodities)		raw materials	
Cause of under- production on produce market	bad harvest	expansion of production in industry → increase of employment in industry → increase of consumption demand	expansion of production in industry → increase of demand for raw materials	
Cause of over- production on industrial market	expansion of production in industry and curtailment of consumption demand for industrial goods		expansion of production in industry	
Reference	April 18, 1850 (<i>MEGA</i> ² 1/10, pp. 302–3); Jan. 28, 1853 (<i>MEGA</i> ² 1/12, p. 29); Sep. 13, 1853 (<i>MEGA</i> ² 1/12, pp. 328–9); Sep. 23, 1853 (<i>MEGA</i> ² 1/12, pp. 345–346)		May–Oct. 1850 (<i>MEGA</i> ² 1/10, pp. 456–457); Jan. 7, 1858 (<i>MECW</i> , vol. 15, p. 430); March 4, 1859 (<i>MECW</i> , vol. 16, p. 209)	June 1856 (<i>MECW</i> , vol. 15, pp. 20–1)

In the earlier period, Marx tended to represent the first view. However, after he realised that ‘the year of greatest British prosperity – 1853 – was a year of high corn prices’¹¹ – a fact which he had recognised by 1855 at the latest – he began to distance himself from the first view, saying: ‘High corn prices must, therefore, in

¹¹ *MECW*, vol. 13, p. 574; *MEGA*² 1/14, p. 26.

such a country [Britain], aggravate and prolong the revulsion; which however, they are unable to create'.¹²

There was an important source from which Marx could obviously learn about the dynamic relationship between the industrial market and the raw material market. It is well known that Marx regularly read Reports of the Chief Inspector of Factories,¹³ where the authors periodically reported (in particular) declining textile prices and increasing raw material prices, leading to squeezed profit margins for manufacturers. In the end, after his experience of the 1857 crisis, Marx came to adopt the inspectors' view of crisis. This step was taken by Marx with such conviction that, seven years later, he decided to devote a chapter of his main work *Capital* to this topic: Volume III, Chapter 6. There, Marx reached a general formulation of this view of double crisis.

The greater the development of capitalist production, and, consequently, the greater the means of suddenly and permanently increasing that portion of constant capital consisting of machinery, etc., and the more rapid the accumulation (particularly in times of prosperity), so much greater the relative over-production of machinery and other fixed capital, so much more frequent the relative under-production of vegetable and animal raw materials, and so much more pronounced the previously described rise of their prices and the attendant reaction. And so much more frequent are the convulsions caused as they are by the violent price fluctuations of one of the main elements in the process of reproduction.¹⁴

The closer we approach our own time in the history of production, the more regularly do we find, especially in the essential lines of industry, the ever-recurring alternation between relative appreciation and the subsequent resulting depreciation of raw materials obtained from organic nature.¹⁵

In Manuscript I of *Capital*, Volume III, Marx was keen to prove this general proposition on the double crisis by making use of empirical evidence from a series of Reports of the Chief Inspector of Factories, some of which were intensively used in his analysis of the 1857 crisis, which he developed across

¹² Marx, *MEGA*² I/14, p. 38, words in parenthesis not in original.

¹³ Concerning this trade-cycle period, Marx cited the report of April 1852 and that of October 1858 in respectively *MEGA*² I/11, pp. 347–8 and *MECW*, vol. 16, p. 209.

¹⁴ Marx 1959, pp. 118–19. For Marx's original text, see *MEGA*² II/4.2, pp. 189–90.

¹⁵ Marx 1959, p. 121. For Marx's original text, see *MEGA*² II/4.2, p. 191.

a number of newspaper articles and letters. The reports show that already since the 1840s the expansion of the textile industry led periodically to over-production of textile products and under-production of raw materials.¹⁶

The other hypothesis that Marx maintained throughout his observation of the trade cycle 1848–58 is closely related to the double crisis hypothesis stated above. Marx assumed the disproportion between fixed capital and circulating capital to be a cause of crisis. He meant that a disproportionately large part of capital tends to be invested ('sunk') in producing fixed capital (buildings, machinery, railway, ships etc.), so that an insufficient amount of capital is left for the needs of circulating capital (raw material, wages etc.).

A mill-owner who would sink in buildings and machinery a part of his capital out of proportion with the part reserved for the payment of wages and the purchase of raw material, would very soon find his mill stopped. The same holds good with a nation. Almost every commercial crisis in modern times has been connected with a derangement in due proportion between floating and fixed capital.¹⁷

This general statement on the disproportion between fixed capital and circulating capital can be considered as another analysis, this time a degree more abstract, of the double crisis set out above. Too much machinery tends to be constructed to be operated with the available raw materials (and wage goods) or even to be worked up into finished products. This phenomenon is nothing but the under-production of raw materials. Marx took this disproportion so seriously as a cause of crisis that he continued to further scrutinise the issue in his *Grundrisse*, where it is called the 'transformation' (Verwandlung) of circulating capital into fixed capital.¹⁸

In view of the crisis hypotheses stated above, especially the concept of double crisis, it was significant that, upon the outbreak of the long-awaited crisis, Marx began to investigate it not only from the angle of the money market, but also to meticulously pursue each movement on the produce and industrial markets. As we see in Table 10.1, the study conducted in this manner resulted in the *Books of Crisis*.

16 See *MEGA*² 11/4.2, pp. 194–200.

17 *MECW*, vol. 15, pp. 20–1. The same logic can be found also in *MEGA*² 1/12, pp. 328–9.

18 About Marx's elaboration on fixed capital, see Mori forthcoming.

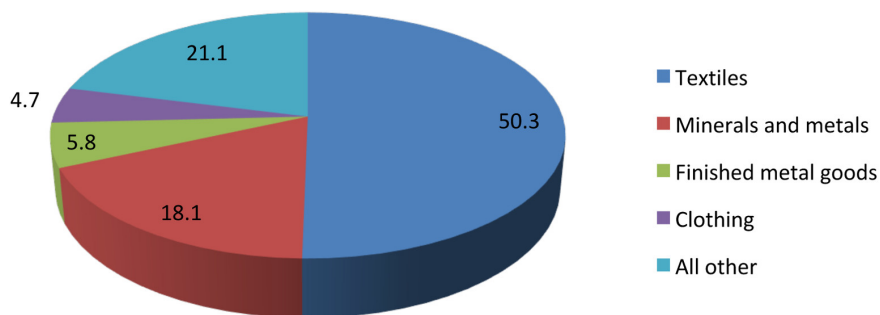


FIGURE 10.2 *Britain's export structure in 1856-7 (% of total export value)*

SOURCE: HUGHES 1960, P. 34

3 Empirical Relevance and Irrelevance of the Double Crisis Hypothesis

Marx focused his attention on the textile industry during the 1848-58 trade cycle because the textile industry was no doubt the leading industry in Britain in this period.

Figure 10.2 shows that textiles represented more than half of export value in Britain at that time. Contrarily, 'railway construction had no important cyclical effects in the 1850s'.¹⁹

Regarding Marx's reasoning on the double crisis, empirical evidence can be supplied from the cotton industry to support his proposition that declining product prices and increasing raw material prices lead to squeezed margins between price and cost. Figure 10.3 shows the ratio of cotton cloth prices (per yard) to raw cotton prices (per lb.) decreasing, and therefore the margin between price and cost shrinking, in the period prior to the outbreak of crisis. The ratio started to recover after a drastic slump in the raw cotton price upon the suspension of the Bank Act on 12 November. The trend that can be identified for the cotton industry was representative for the textile industry as a whole (Hughes 1960, Ch. 5).

Figure 10.4 shows that both prices have a pattern in common that has two peaks in 1853 and 1857 and continued to rise from 1855 (1854 in the case of raw cotton) until it dropped on the outbreak of crisis in November 1857. The margin between both continued to decline up to the 1857 crisis, as shown in Figure 10.3, because the raw cotton price rose more rapidly than the cloth price, as shown

¹⁹ Hughes 1956, p. 219.

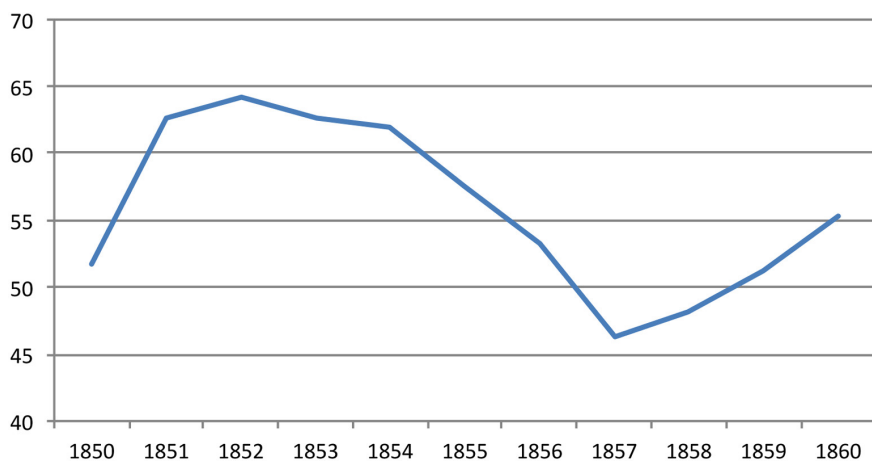


FIGURE 10.3 *Ratio of cotton cloth to raw cotton prices (%)*

SOURCE: HUGHES 1960, P. 84

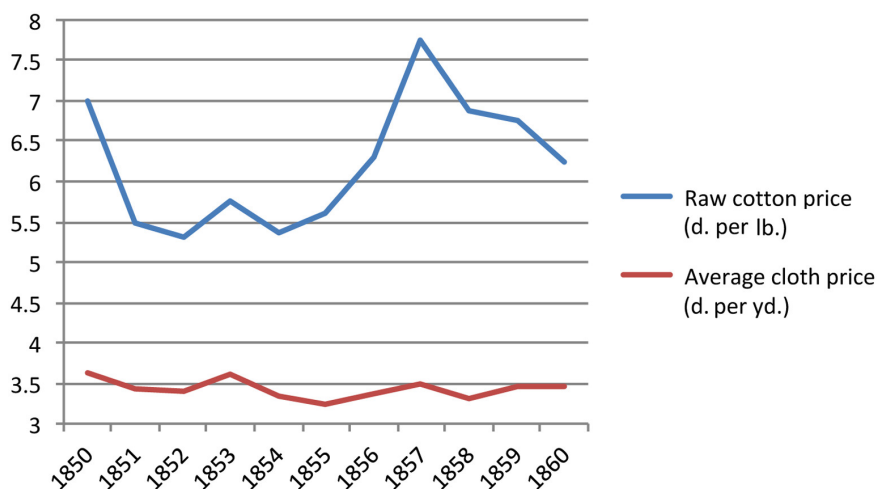
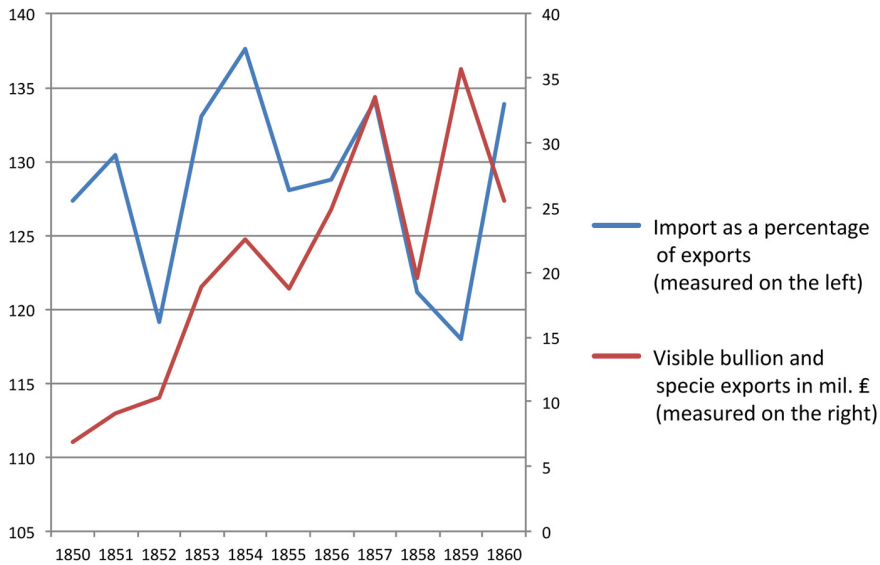


FIGURE 10.4 *Cotton cloth and raw cotton prices*

SOURCE: HUGHES 1960, P. 77

in Figure 10.4. Engels's graph of the raw cotton price, which was attached to his letter to Marx on 16 November 1857,²⁰ was nothing but a magnification of the 1857 peak.

²⁰ *MEGA*² III/8, p. 199. For more about Engels's contribution to Marx's concept of double crisis, see 'Einführung' in *MEGA*² IV/14.

FIGURE 10.5 *Excess of import and bullion export in Britain*

SOURCE: HUGHES 1960, P. 56

Furthermore, as raw materials were imported and products were exported in the textile industry, the declining product price and increasing raw material price must have contributed to a deterioration of the terms of trade, an excess of imports and eventually a gold efflux from Britain, which was to reduce bullion at the Bank of England.

By the way, the data in Figure 10.5 show that imports exceeded exports throughout the decade, so Marx's statement in the *NYDT* article, written on 15 October 1852, must have been either wrong or only valid for the short time that exports were in excess of imports.²¹

4 Aporia of Double Crisis

Although, as we have just seen, the double crisis hypothesis which Marx had cleaved to throughout his observation of the 1848–58 trade cycle could not be refuted by empirical data, it was another question whether the hypothesis was generally valid for all crises, and not only the one that broke out in 1857. The logic of double crisis is only applicable if the sectoral interdependence

21 See *MEGA*² 1/11, pp. 348–9.

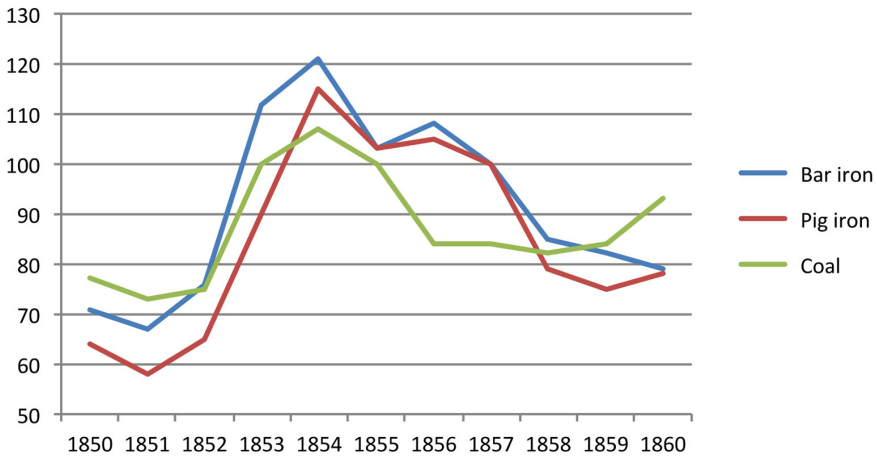


FIGURE 10.6 Price index of bar iron, pig iron and coal in UK, 1850–60 (1867–77=100)

SOURCE: HUGHES 1960, P. 166

between finished goods and raw materials is linear. This was typically the case in Britain's textile industry at that time, because raw materials were produced in agriculture abroad while textiles were produced in factories in Britain. The flow of production is linear in the sense that products flow unilaterally from agriculture to industry, so that we are allowed to treat raw material production as exogenous constraints for the textile industry.

The situation is completely different in the coal and steel industry combined into a single, unitary sector, as with the 'Montanindustrie' in Germany. The flow of production is here more or less circular in the sense that outputs are used as main inputs, so that coal and steel each appear as output as well as input.²² In such a case, the logic of double crisis cannot be valid because the same thing (e.g. coal-steel as a product unit) cannot be simultaneously over-produced *and* under-produced. As a matter of fact, iron and coal prices in the 1850s show a different dynamic from the prices of textiles and their raw material.

Contrarily to the price dynamics of textiles and their raw material, which, as can be seen in Figure 10.4, had two peaks in 1853 and 1857 and continued to rise up to the outbreak of crisis in November 1857, iron and coal prices, as can

22 Spiethoff was one of the first economists to acknowledge the relevance of this circularity for the causality of crisis. He categorised iron and coal as '*mittelbare Verbrauchsgüter*' (goods for indirect consumption) and pointed out a close relationship between their circularity and the excessive expansion of equipment for producing them (Spiethoff 1925, pp. 76–7).

be seen in Figure 10.6, show a common pattern which has one marked peak in 1854 (excepting a slight recovery of iron in 1856) and a continued *decline* lasting through the crisis of 1857. This implies that the iron and coal industry was already from 1855 in the phase of *depression*, without experiencing such acute crisis phenomena as the textile industry.

In the case of linear flow, the crisis might be modelled in terms of the Hicksian 'constrained' cycle, hitting an exogenously given resource ceiling²³ as Hughes suggested.²⁴ In the case of circular flow, however, we need another theoretical framework which endogenises input (raw material) constraints. This framework turned out to be indispensable from the 1873 crisis at the latest, because the 'iron age' that Marx and Engels saw as being long past²⁵ revived and overwhelmingly replaced the 'cotton age', changing the pattern of the business cycle.

5 Parallels with Contemporary Writers: Tooke, Newmarch, Michaelis and Wirth

The analysis that Marx conducted of economic development in the decade leading up to the 1857 crisis, and especially his crisis hypotheses, was not very usual at that time. Contemporary economic journalists and scholars tended rather to stick to money market phenomena characterised by speculations and manipulations. An authentic representation of this trend was the Report of the Select Committee on the Bank Acts and the Recent Commercial Distress, which concluded in 1858 that 'the recent commercial crisis in this country, as well as in America and in the North of Europe, was mainly owing to excessive speculation and abuse of credit'.²⁶

Several contemporaries, however, tried to transcend monetary phenomena and capture the industrial aspect of the trade cycle resulting in the 1857 crisis. One such insightful study was obviously Thomas Tooke and William Newmarch's *A History of Prices*. Its volumes v and vi deal with the very period from 1848 to 1856 and were published shortly before the outbreak of the crisis at the beginning of 1857. Marx read the two volumes immediately after their publication and conveyed in some letters to Engels his impression that they

23 Hicks 1950.

24 Hughes 1956.

25 *MECW*, vol. 10, p. 501.

26 Evans 1960, p. 91.

were interesting and important.²⁷ Though he had some reservations, he gave due respect to Tooke's work, and announced the death of his 'friend' a week later in another letter to Engels: 'Friend Thomas Tooke has died, and with him the last English economist of any value.'²⁸ As a matter of fact, there are several parallels between this classic book and Marx's crisis analysis in the 1850s. Not only do they share a critical attitude to the Bank Act of 1844, a due attention to the French economy and a meticulous survey of produce and industrial markets. Interestingly, they also *de facto* share the same view of economic development leading to the 1857 crisis which was formulated by Marx, in his own way, as the 'double crisis' (I say 'de facto' because the relevant text in the *History of Prices* consists of quotations from other reports and circulars, which were, however, obviously introduced in an affirmative way). In this sense, there would be no incongruity in reading Marx's *Books of Crisis* as a continuation of Tooke and Newmarch's *History of Prices* for the following period of 1857–8. One might even feel tempted to say that the latter served the former as a model.

The shared view of Tooke/Newmarch and Marx can be (at least partly) accounted for by their common usage of the same source, namely the Report of the Chief Inspector of Factories and Workshops by Leonard Horner. The *History of Prices* affirmatively cited Horner's report for 1851, 1853, 1854 and 1855,²⁹ which repeatedly described details about the over-investment which resulted in increasing raw material costs and decreasing product prices for cotton manufacturers. The outline of economic development in the period from 1848 to 1856 which emerges from the voluminous assemblage of facts in the *History of Prices* could be reconstructed as follows.

Since 1851, the demand for British exports has increased, especially from the 'Gold Countries', i.e., the USA and Australia, where the goldmines were discovered in 1849 and 1851 respectively. The large demand in these countries for British manufactured goods caused higher prices for these goods and shipping freights. Due to high prices, production was extended, which in turn increased employment, income and therefore consumption demand of workers, also in the domestic markets.

But a larger Demand springing from what source? The answer is obviously – springing from the expenditure of larger Incomes in the purchase

27 MECW, vol. 40, pp. 102 and 126; MEGA², III/8, pp. 80 and 107.

28 MECW, vol. 40, p. 284; MEGA², III/9, p. 94.

29 See respectively Tooke and Newmarch 1857, vol. v, pp. 260, 290, 316 and 326–7.

of Commodities; and those larger incomes, whether Wages or Profits we have traced to the increased demand for Exportable Goods in the Gold Countries.³⁰

The increasing demand and higher prices induced a large scale of investment in new factories and ships in 1852 and 1853. The investment boom was unduly escalated by an unprecedentedly low level of interest rates, as the discount rate of the Bank of England was kept at two percent over a period of nine months. Investment was further intensified and extended to every part of the economy.

In the autumn of 1852 ... the Bank of England minimum rate was 2 per cent. – the total stock of bullion in the two departments of Banking and Issue was larger than at any former period – ... and new advances were obtained on easier terms than had been before known ... the confident opinions which were entertained and expressed as to the continuance of such a state of things, had gradually generated a spirit of Speculation.³¹

The brisk activity of extended production and new investment required every kind of raw material, not only those for consumption goods (cotton, wool etc.) but also for production goods (timber, metal etc.). Correspondingly, the price of raw materials was increasing most rapidly among all classes of commodity.

[T]he Groups of Commodities which exhibit the most important instances of a Rise of Price are the Raw Materials most extensively used in Manufactures, and the production of which does not admit of rapid extension.³²

From the last half of 1853, the reaction began to be felt. The markets for manufactured (consumption) goods in Britain and also the Gold Countries were gradually saturated so that the phenomenon of 'over-production' appeared. Correspondingly, the price of these goods began to decline. On the other hand, the new factories and machines which had begun to be constructed during the period of high demand, continued to be brought into operation.

30 Tooke and Newmarch 1857, vol. VI, p. 225.

31 Tooke and Newmarch 1857, vol. V, p. 277.

32 Tooke and Newmarch 1857, vol. VI, p. 169.

[T]he first and immediate effect of the High Prices of Colonial and other Imported articles in 1852 and 1853, and of the High Prices and large demand for Manufactured Goods in the same years, was to occasion vigorous efforts and a large expenditure of capital, with a view to opening up new fields of supply, and creating extended means of production; and ... it is principally to the operation of these causes, that the steady and frequently declining course of prices since 1853 is to be attributed.³³

From this time on, therefore, manufactures suffered both from increasing raw material prices and decreasing product prices, so that their profit situation continued to deteriorate, a phenomenon which Marx described as a process of the (second version of) 'double crisis'.

The authors of the *History of Prices* backed up their view using evidence from the Report by L. Horner, as did Marx. They quoted Horner on the increase of factory power caused by continuous erection of new mills, and the resulting disproportion of prices between raw cotton on the one hand and yarns and goods on the other.³⁴ They keenly pursued this course of development in the following years also – that is, 1854 and 1855 – by quoting several circulars of trade companies testifying that the profitability of textile manufacturers continued to deteriorate due to this disproportion (or lessening margin) between raw material costs and product prices.³⁵

This state of industrial production could not fail to exert a grave influence on foreign trade and the money market. The large demand for raw materials from abroad and their increasing price on the one hand, and the stagnating export of manufactured goods, on the other, enlarged the British deficit in the balance of trade. Correspondingly, the exchange rate of British bills lowered to the level at which a continuous drain of gold from the Bank of England was set in motion. The Bank abandoned the lowest level of discount rate in January 1854 and continued to raise it up to 5.5 percent in 16 months.

[T]here was a balance against this country to be paid in bullion. In other words, our demand for foreign commodities was so great, as to absorb the whole of our vast exportations of Goods, and also the whole of the Gold which came to us from Australia. Hence it was clear that the

33 Tooke and Newmarch 1857, vol. v, p. 344.

34 Tooke and Newmarch 1857, vol. v, pp. 326–8.

35 Tooke and Newmarch 1857, vol. v, pp. 331–2.

consumption and production then going on in this country were enormous and unexampled.³⁶

[I]t had led to an export of Bullion from this country, of sufficient magnitude not only to carry off, as they arrived, the supplies from Australia, but also to diminish the stock of bullion previously in the possession of the Bank of England.³⁷

The higher interest rate made it more difficult for merchants to take on credit in order to maintain their stocks of manufactured goods, which tended to push down their prices still further. Only timely arrivals of gold from Australia (and the USA) at critical moments, and the feedback effects of enormous war spending, could forestall the outbreak of acute crisis in the following years. In particular, a good part of the gold sent to the European Continent and the Levant in order to finance the Crimean War (which after the Napoleonic war was the most expensive in British history) returned from there against sales of British manufactured goods.

It is true though that there is a difference between the authors of the 'History of Prices' and Marx which should not be overlooked. Tooke and Newmarch tend to attribute a decisive part of the approaching 'alarm and panic' to the Bank Act of 1844, which is considered to have had an amplifying effect on the Bank of England's discount rate, to both extremes:

[T]he opinion which I expressed, when writing on the subject in March, 1844 [has been amply borne out by experience]; – 'That the total separation of the business of Issue from that of Banking is calculated to produce greater and more abrupt transitions in the rate of interest and in the state of credit than a system of union of Departments'.³⁸

Without the Bank Act, there would have been no such low rate as 2 % in 1852, which inspired undue confidence, and therefore no need of such high rates as 5.5 % in 1854 (let alone 10 % in 1857!), which required but a slight increase to cause 'alarm and panic'.³⁹ Marx on the other hand was reluctant to attribute an economic crisis to a particular historical event such as the discovery of gold or to a current policy such as the Bank Act, but, as already mentioned, he tended

36 Tooke and Newmarch 1857, vol. v, p. 282.

37 Tooke and Newmarch 1857, vol. v, p. 279.

38 Tooke and Newmarch 1857, vol. v, p. 637.

39 Tooke and Newmarch 1857, vol. v, pp. 559–60.

to seek its cause rather in a structural feature of production, in particular the disproportion between fixed capital and circulating capital, itself due to a specific periodicity of fixed capital. This difference may have been expressed in his reservations about Tooke's arguments. Marx twice pointed out their one-sidedness in his letters to Engels:

It is, of course, a pity that in his unrelenting battle with the currency chaps and Peel's Acts, the old gentleman is too exclusively concerned with the question of circulation.⁴⁰

A pity that the old man's head-on collision with the currency principle chaps should lead him to give such a one-sided turn to all his disquisitions.⁴¹

There are still other contemporary witnesses of the 1857 crisis who tried to seek the 'ultimate cause' of the crisis in production. One such insightful researcher was Otto Michaelis. 'Since it cannot indeed "float in the air" that at some one time the whole world speculates and operates wrongly, we must try to figure out the cause of this general failed direction of trade operations'.⁴² He then focused his attention on biased investment to 'fixed capital [stehendes Kapital] ... that is consumed gradually in a long series of production processes and cannot be recovered in one turnover with profit'. This biased investment into fixed capital and its long-term tie-up inevitably cause a shortage of 'circulating capital' like raw materials and consumption goods, resulting in the soaring prices that gave rise to a world-wide wave of speculations.⁴³

Max Wirth, another witness of the 1857 crisis, got to the heart of the issue by pointing out that

Although ... the production was greatly increased by means of the application of mighty machine powers and useful instruments ... the capital could not be provided from the annual revenue for all these undertakings which increased effusively in the years of 1856/57 even if there had been no other reason than the following. A large part of the working classes whose continuous work used to increase the annual income was employed in these years in the transformation of circulating capital to

⁴⁰ *MECW*, vol. 40, p. 102; *MEGA*² III/8, p. 80.

⁴¹ *MECW*, vol. 40, p. 126; *MEGA*² III/8, p. 107.

⁴² Michaelis 1873, p. 326.

⁴³ Michaelis 1873, pp. 264–5 (translated from the German by Mori).

fixed capital, in constructing ships and factory buildings, and in exploiting coal mines. They promise indeed abundant benefit for the future, but do not yet bring in any profit for the next years.⁴⁴

From the viewpoint of the history of economic thoughts, the idea of a disproportion between fixed capital and circulating capital, which Marx adopted to explain the 1857 crisis and characterised in his own manner as 'double crisis', does indeed possess a long tradition. Apart from the business cycle of 1848–57, Hayek listed, among others,⁴⁵ J. Wilson,⁴⁶ M. v. Tugan-Baranovsky and A. Spiethoff as representatives of this stream of ideas. Marx is listed as well.⁴⁷ And as Hayek mentioned correctly, the origin of this tradition can be found in Ricardo's *Principles*, namely in the chapter 'On Machinery'.

6 The Ricardian Origin

The famous chapter xxxi 'On Machinery' of Ricardo's *On the Principles of Political Economy and Taxation* was motivated, as is well known, by the author's awareness of a 'mistake' and the necessity of a 'considerable change' in his opinion about the influence of machinery on the interests of the different classes of society. While he had thought previously that 'the labouring class would, equally with the other classes, participate in the advantage, from the general cheapness of commodities arising from the use of machinery', he was now convinced that 'the substitution of machinery for human labour, is often very injurious to the interests of the class of labourers'.⁴⁸

A new insight which brought about a considerable change in his opinion was a paradoxical one, namely that less products would be produced in the economy after the introduction of machinery (however efficient it might be). 'All I wish to prove, is, that the discovery and use of machinery may be attended with a diminution of gross produce'.⁴⁹

44 Wirth 1890, p. 310 (translated from the German by Mori).

45 Hayek mentioned also T.S. Ashton, T.H. Williams, J. Mills, B. Price, J.G. Courcelle-Seneuil, V. Bonnet, Y. Guyot, C. Bresciani-Turroni as representatives of this stream (Hayek 1935, pp. 101–4).

46 For more about Wilson, see Mori forthcoming.

47 Hayek 1935; Boot 1983.

48 Ricardo 1951, pp. 386 and 388.

49 Ricardo 1951, p. 390.

He attempted to 'prove' this result by using the following numerical example.⁵⁰ Consider an economy where there is one capitalist producing as final product the only consumption good of the economy (such as 'joint business of a farmer, and a manufacturer of necessities'). He employs 7,000l. as fixed capital ('buildings, implements, &c. &c.') and 13,000l. as circulating capital (consumption goods as wage goods). Fixed capital is considered to work forever in 'its original state of efficiency' i.e. without depreciation. The profit rate is assumed to be 10 %. Then, every year, the gross produce is consumption goods of 15,000l., of which 2,000l. is 'net produce' (i.e. profit) and consumed by the capitalist.

Suppose now that in some year (say year 0), the capitalist employs half of his capital (i.e. 6,500l. circulating capital and obviously also 3,500l. fixed capital) in constructing a machine instead of producing the consumption good. The construction period is assumed to be just one year. Then, the gross produce of this year is a new machine of 7500l. and the consumption good of 7,500l., of which 2,000l. is consumed as profit of the capitalist.

In the next year (year 1), he starts his production of the consumption good with fixed capital now of 14,500l. and circulating capital of 5,500l. The gross produce of this year would be no more than the consumption good of 7,500l.

According to this example, a considerable amount of circulating capital (here a half of the existing one, i.e. 6,500l.) is absorbed to produce the new machine (a future fixed capital) in year 0. This very characteristic phenomenon of the industrialisation process was to be called by several authors the 'transformation' (*Verwandlung*) of circulating capital to fixed capital, following Ricardo's reasoning. The result of this 'transformation' was taken seriously by Ricardo and his followers, too. The production of the consumption good must be reduced to a half in year 0 and afterwards.

Although the *value* of gross produce is reduced to a half, its *real* amount may be the same or even increase if its price would be reduced by 50% or more in year 1 and afterwards because of the efficiency of the new machine. But it need not be. Any small price reduction would suffice for a rational capitalist (under competition) to introduce the machine. Therefore, the efficiency of the new machine does not exclude the possibility that after its introduction, the economy's gross produce would be reduced in both value and real terms.

This Ricardian reasoning concerning the under-production of consumption goods was adopted by the above-mentioned authors, including Marx, to explain the economic crises of 1847 and 1857 using a version of the 'transforma-

50 Ricardo 1951, pp. 388–9.

tion of circulating capital to fixed capital' thesis. In its application, however, the circulating capital was taken in a proper sense, namely as not only consumption goods, as with Ricardo, but also raw materials, and the construction period was also treated more realistically, i.e. as lasting for longer than one year. On the other hand, one merit of the abstract model fell victim to the process of application to a complex reality. In Ricardo's model, the amount of consumption goods (and raw materials) is not exogenously given – as in many crisis explanations, including the concept of 'double crisis' – but endogenously determined as annual 'gross produce'.⁵¹

The stream of ideas which was originated in Ricardo's inquiry into machinery continues to the present time to be a basis for further elaborations, such as crisis theories by A. Aftalion and M. Bouniatian,⁵² and it found a generalised (and also endogenous) formulation in J. Hicks's theory of technical change and the trade cycle.⁵³

51 The first general formulation of the endogenous treatment can be seen in Hicks 1973. See Mori forthcoming.

52 Aftalion 1927 and 2005; Bouniatian 1928.

53 Hicks 1973. For more about Hicks, Aftalion and Bouniatian, see Mori forthcoming.

Marx Meets Manchester. The Manchester Notebooks as a Starting Point of an Unfinish(ed)able Project?*

Matthias Bohlender

The example of Marx helps us to understand that the voice of writing, a voice of ceaseless contestation must constantly develop itself and break itself into *multiple* forms. The communist voice is *at once* tacit and violent, political and scholarly, direct, indirect, total and fragmentary, lengthy and almost instantaneous. Marx does not live comfortably with this plurality of languages which always collide and disarticulate themselves in him. Even if these languages seem to converge to one endpoint, they could not be retranslated into each other, and their heterogeneity, the divergence or gap, the distance that decenters them, renders them noncontemporaneous.¹

MAURICE BLANCHOT



On the first of August, 1846, Marx wrote a letter to the publisher of his announced two-volume book *Kritik der Politik und Nationalökonomie*, in which he apologised for not submitting the manuscript by the due date. Yet, he was more than confident that, after some necessary additions and rewritings – having just collected ‘fresh material’ in Manchester – the work would be accomplished, and finally published by the end of November.² Then, in spring 1851, Marx wrote very hopefully to Engels concerning the state of affairs with his still ongoing book project: ‘I am so far advanced that I will have finished with

* I am grateful to Jorma Heier, Anna-Sophie Schönfelder and Matthias Spekker for helpful comments and criticism. My thanks go also to Lucia Pradella for her stimulating comment on my paper at the conference in Amsterdam.

1 Blanchot 1997, pp. 99–100.

2 *MECW*, vol. 38, p. 48; *MEGA*² III/2, p. 24.

the whole economic stuff in 5 weeks' time. *Et cela fait* I shall complete the political economy at home and apply myself to another branch of learning at the Museum.³ Eight years later, shortly before the publication of his *Zur Kritik der politischen Ökonomie*, he wrote to Engels, saying that of course the book was far from being accomplished, yet if the reception should turn out well, the central and important 'third chapter on capital can follow very soon'.⁴ Even when Marx finally published the first volume of *Capital* in 1867, the book project, which by then had taken more than twenty years already, was far from being completed. The apparently unfinished and unfinishable project went on with the hopeful announcement of *Capital* Volume II.

What does this perpetual delay mean? Can we blame the unfinished nature of the project on Marx, the great procrastinator? Or should we ascribe the impossibility of completing the project to its scope, its enormous scientific and interdisciplinary dimensions, hardly accomplishable for a 'one-man-band' like Marx in the nineteenth century? In this paper, I will propose a different answer. I will try to follow the trail that Maurice Blanchot laid when speaking of multiple voices in Marx, voices and languages of a Marxian project that are 'at once tacit and violent, political and scholarly, direct, indirect, total and fragmentary, lengthy and almost instantaneous'. I will pursue the idea that Marx's project was, and necessarily had to be, a multilingual project of *critique* right from the start, while at the same time, Marx did 'not live comfortably with this plurality of languages which always collide and disarticulate themselves in him'. Therefore, in a sense, one can say that the unfinished nature of the Marxian project is owed to the project itself – not to its scope or range, but to its inner constitution, that is to say, its different voices, languages and the impossibility of unifying them and ultimately forcing them into one clear and encompassing theoretical unity.

Perhaps the best way to illustrate Marx's multilingual and multilayered project is to take a step back in the developmental process of his thought. I will return to the point where Marx's unfinished and unfinishable project of a critique and the anatomy of the capitalist mode of production began. This starting point, I will argue below, is owed to Marx's (and Engels's) journey to Manchester, and his reading there in the Chatham Library. In the summer of 1845, *Marx meets Manchester* – and this encounter gave his project a decisive push and turn in a definite materialist and political direction. To recall this starting point is important for two reasons: first, we may come to a better under-

3 MECW, vol. 38, p. 325; MEGA² III/4, p. 85.

4 MECW, vol. 40, p. 368; MEGA² III/9, p. 275.

standing of the central idea and political impulse Marx was following in the course of his later writings; secondly, we will be able to perceive right from the start the problems of Marx's project, namely the plurality of its languages, its 'unfinishableness'.

Two Problematisations and the Birth of a New Materialist Theory

All starting points, particularly in Marx's *oeuvre*, are difficult to determine. Yet, even if one has some serious – and understandable – problems with Althusser and his famous thesis of a so-called 'epistemological break' or rupture in Marx's writings,⁵ one cannot deny that the years from 1845 to 1848 were decisive years of change and transformations, in various ways. In this formative and transformative period of Marx's thought, we can observe the birth of what will become his life-long political and scientific project of a *critique of political economy*. Within just a few years, Marx abandoned his former anthropological and philosophical approach, and with writings such as the *German Ideology*, *Poverty of Philosophy* and the *Communist Manifesto* he demonstrates that he seeks to elaborate a new, that is to say, a profound materialistic theory of history and society – what later will be called *historical materialism*.⁶

Two new and emerging problematisations were significant for Marx's 'discursive transposition'⁷ from a philosophical-anthropological approach to a materialistic conception and political theory of history and society from the years 1845 onward: first, the questioning and criticism of and the turning away from the 'German ideology' of the Young Hegelians, especially Feuerbach and his philosophical-anthropological conception of 'Man as a generic being'. Max Stirner's book *The Ego and its Own* (1844) is the central influence in this move.

5 See Althusser 2005, p. 227; more recently Heinrich 1999 and as an extension, for a variation of Althusser's concept, Lindner 2014.

6 It is well known that the term 'historical materialism' was coined by Friedrich Engels. The classical passage is: 'And, thus, I hope even British respectability will not be overshocked if I use, in English as well as in so many other languages, the term "historical materialism", to designate that view of the course of history which seeks the ultimate cause and the great moving power of all important historic events in the economic development of society, in the changes in the modes of production and exchange, in the consequent division of society into distinct classes, and in the struggles of these classes against one another' (*MECW*, vol. 27, p. 289; *MEGA*² 1/32, p. 116).

7 I owe the term 'discursive transposition' to Kojin Karatani and his extraordinarily stimulating book on Kant and Marx (Karatani 2003, p. 138).

As early as November 1844, Friedrich Engels wrote to Marx: 'Stirner is right in rejecting Feuerbach's "man" ... Feuerbach deduces his "man" from God, it is from God that he arrives at "man", and hence "man" is crowned with a theological halo of abstraction. The true way to arrive at "man" is the other way about. We must take our departure from the Ego, the empirical, flesh-and-blood individual, if we are not, like Stirner, to remain stuck at this point but rather proceed to raise ourselves to "man". "Man" will always remain a wraith so long as his basis is not empirical man. In short we must take our departure from empiricism and materialism if our concepts, and notably our 'man', are to be something real'.⁸ Consequently, in the Stirner-chapter of the *German Ideology* Marx criticises not only Feuerbach and Stirner, but equally his own earlier position as pure 'philosophical phraseology' (alienation, estrangement, man, human essence, species being etc.). The demand 'to leave philosophy aside' or 'to leap out of philosophy'⁹ indicates a change in the epistemological framework of his criticism. The true task of a (future social) critique is not to *reveal* the impossibility *to become a true human being* in this socio-economic world of alienation, nor lay bare the de-humanisation, the sheer futility of realising all the capabilities of the 'species being' within this inverted world. Within this philosophical frame of thought, the socio-economic facts (pauperism, impoverishment) and the political-economic categories (labour, property) turn into mere illustrations of a general *philosophical theory of alienation* – or as Stirner put it, 'human liberalism'.¹⁰ Therein, the 'impoverished worker' plays merely the role of an exemplification, a subdued particular of the whole dehumanised 'species-essence'; he/she is not more than a rhetorical figure, a trope.¹¹ Consequently, this kind of *philosophical criticism* needs to be dismissed and replaced with a *social critique* that renounces the critical

8 *MECW*, vol. 38, pp. 12; *MEGA*² III/1, pp. 252. Concerning the huge epistemological impact of Stirner on Engels's and Marx's concept of materialism, see Stedman Jones 2002, p. 140; Karatani 2003, p. 169; Pagel 2009; Arndt 2012, p. 48; and Lindner 2014, p. 127.

9 *MECW*, vol. 5, p. 236.

10 'The *human religion*', Stirner explains, 'is only the last metamorphosis of the Christian religion. For liberalism is a religion because it separates my essence from me and sets it above me, because it exalts "Man" to the same extent as any other religion does its God or idol, because it makes what is mine into something otherworldly, because in general it makes out of what is mine, out of my qualities and my property, something alien – to wit, an "essence"; in short, because it sets me beneath Man, and thereby creates for me a "vocation"' (Stirner 1907, p. 96).

11 Hence Marx's fundamental criticism of a mere idealistic, that is to say rhetorical, use of language, terms and concepts in the *German Ideology*.

stance from *outside* of the discursive field of political economy and social history; the critic, as well as the practice of critique, have to be perceived and performed *within* what Marx and Engels call the 'real', the 'sensuous', the 'empirical world'; that means within the field of class rule, social antagonisms and political struggles.¹² The impact of Stirner's criticism of Feuerbach and the Young Hegelians is not only important in terms of the formation of Marx's own materialistic conception and theory of society; in the argument with Stirner, Marx in fact performs a discursive transposition: he displaces his epistemological position of critique – from a *philosophical criticism* of the modern, that is to say estranged and alienated, way of life to a *social critique* of power and class-domination on the basis of a capitalist mode of production.¹³ In order to understand this shift fully, the emergence of a second problematisation is crucial.

This second problematisation refers to the use of the term 'communism'. Although the term already played a certain role in the *Economic and Philosophic Manuscripts* of 1844, it was not before Marx actively entered the political-strategic field¹⁴ that he was compelled to clarify what it means to be a 'communist'. The questions now urgently posed were the following: What group or party should legitimately apply the term to their political programme? How could one draw a clear and distinct line between those who call themselves communists and other groups within the left-wing political movements of the day in France, England and Germany ('true socialist', Proudhonists, Babouvists, Blanquists, Social Democrats, Owenites, Chartists)?¹⁵ How should one deal with all these different denominations, fractions, programmes, politics and strategies? It was therefore necessary to clarify the terms and to draft a political programme as a reference for those who considered themselves 'communists'.

12 Marx is speaking literally of a subjective transposition to 'devote oneself like *an ordinary man* to the study of actuality, for which there exists also an enormous amount of literary material, unknown, of course, to the philosophers' (*MECW*, vol. 5, p. 236; my emphasis).

13 Even though I do not share the specific Althusserian distinction between *ideological* criticism and *scientific* critique in all of its details, it was Jacques Rancière (1989) who pointed out this shift from *criticism* to *critique* for the first time. See also Arndt 2012, p. 48 and Lindner 2014, p. 127.

14 Schieder (1991, p. 35) has clearly pointed out that Marx was not engaged in the politics of the organised workers' movement until his move to Brussels in February 1845. Though he praised the French artisan-workers as a 'nobility of man' that 'shines upon us from their work-hardened bodies' (Marx, *MECW*, 3, p. 313; *MEGA*² 1/2, p. 425), the semantics and diction alone reveal a kind of intellectual romanticism.

15 A helpful overview of these different socialisms and communisms in France and England between 1830 and the 1840s is offered by Stedman Jones 2002, p. 39.

Obviously, it was in the debates within the London Section of the *League of the Just* (1845/47), the *Communist Correspondence Committees* (1846/47) and at last in the disputes concerning the constitution and renaming of the *Communist League* (1848) that Marx (and Engels) worked out the first outlines of a communist political theory and strategy.¹⁶ In a decisive dispute with Wilhelm Weitling in Brussels in March 1846, for instance, Marx aggressively and resolutely – as Pavel Annenkov reported the encounter – asks for a clear ‘selection’ – if not to say a ‘cleansing’ – within the communist party.¹⁷ According to Marx, Weitling’s ‘Handwerkerkommunismus’ (communism of artisans and craftsman) on the one hand, and Hess’s ‘philosophischer Kommunismus’ (philosophical communism) on the other hand, had to be combatted and ruled out. The workers, Marx argues, need no philosophical phantasms but a ‘strong scientific idea and positive doctrine’. ‘In a civilized country like Germany ... people cannot bring about anything without a positive doctrine and indeed have brought about nothing so far but noise, noxious revolts and the decline of our cause’.¹⁸ The enormous distance between this newly formulated political stance in 1846, and the one Marx still advanced in August 1844, could hardly be underestimated. Back then, he praised Weitling as one of the giants and true personification of the German proletariat – ‘the theoretician of the European proletariat’, as he put it. In the same vein, he imagined and invoked the Silesian uprisings¹⁹ as the start of a social and proletarian revolution – incomparably advanced in relation to the uprisings of the French and English workers.²⁰ Thus we have on the one hand a ‘philosophical’ Marx totally enthused about Weitling and the ‘German Proletariat’ as the avant-garde of the

16 The practical test of this first political programme and strategy (*The Communist Manifesto*) came subsequently in the revolutionary period from 1848 to 1850. See especially for this Kluchert 1985.

17 In a letter to Moses Hess, Weitling spoke of a ‘Sichtung in der kommunistischen Partei’ that Marx was demanding. The term is used here not only in the sense of ‘to make an inventory’, but also ‘to screen or select’ the communist doctrines for the best political strategy. See *Der Bund der Kommunisten* 1983, p. 307.

18 *Der Bund der Kommunisten* 1983, p. 304 (author’s own translation). On the different debates and discussions concerning a communist political strategy and theory within the League of the Just and the Communist League see Meyer 1999, p. 236 and p. 262; also worth reading in relation to this matter is Lattek 2006, p. 24.

19 On the historical event of the Silesian uprisings in June 1844 and the different political attempts to exploit and mythologise it, see von Hodenberg 1997. According to her account of the events, Marx, Engels but also Wolff and Heine were an early part of a socialist reception line whose aim was to construct an effective myth of the workers’ movement.

20 *MECW*, vol. 3, p. 201; *MEGA*² 1/2, pp. 459.

coming European social revolution; on the other hand we have Marx, the politician who, right in the middle of organising a European communist network (the Communist Corresponding Committees), is convinced that with Weitling, Hess, Karl Grün and all the other 'Straubingers' (communist artisans) nothing can be achieved.²¹ In the end, I think, there are good reasons to believe that, comparably to the shift from *philosophical criticism* to social critique, Marx turned away from a *philosophical communism*,²² and seeks to conceptualise a *communist political theory and strategy*, based on a historical and materialistic conception.

Two Different Languages, Two Different Voices of Critique

At the centre of this new and encompassing theory, one can find two elements, two important features. First of all, we are confronted with a new conception of politics, a new political language. For the first time, Marx discovers the modern concept of 'classes' (classes of society, ruling classes) and the political concept of a 'class struggle' and 'class relations'. By acquiring and applying the new political language, he recognised that the modern civil/bourgeois society is deeply affected by and antagonistically divided into two hostile classes (proletariat and bourgeoisie); and he realises furthermore that only a radical upheaval or revolution of this society will abolish or remove this split, together with its class-based rule and domination. It is little surprise, then, to find in a letter written to Joseph Weydemeyer in 1852 a first balance made up of Marx's achievements so far: 'And now as to myself, no credit is due to me for discovering the existence of classes in modern society or the struggle between them. Long before me bourgeois historians had described the historical development of this class struggle, as had bourgeois economists their economic anatomy. My own contribution was (1) to show that the existence of classes is merely bound up with certain historical phases in the development of production; (2) that the class struggle necessarily leads to the dictat-

21 Concerning this matter, Engels wrote to Marx at the end of December 1846: 'We have learnt from that business that, in the absence of a proper movement in Germany, nothing can be done with the Straubingers, even the best of them ... Vis-à-vis *ourselves* these lads declare themselves to be "the people", the "proletarians", and we can only appeal to a communist proletariat which has yet to take shape in Germany' (*MECW*, vol. 38, p. 92; *MEGA*² III/2, p. 67).

22 Doubtlessly the pivotal figure of such a 'philosophical communism' at that time was Moses Hess. See especially Rosen 1983, and in general Breckman 2001, p. 192.

orship of the proletariat; [and] (3) that this dictatorship, itself, constitutes no more than a transition to the abolition of all classes and to a classless society'.²³

Despite the fact that Marx would later on make some substantial modification to this political theory of classes and class struggle (notably in his later political writings, *The Eighteenth Brumaire of Louis Napoleon*, *The Civil War in France*, *Critique of the Gotha Program*), we can already see the fundamental framework of his political language here – a framework he would hold to in his later writings, and that would determine his project of a *critique of political economy* decisively. When Marx wrote in a letter to Johann Philipp Becker in April 1867 that *Capital* 'is without question the most terrible missile that has yet been hurled at the heads of the bourgeoisie (landowners included)';²⁴ we find ourselves in the midst of Marx's political language; furthermore we understand more clearly that *Capital* is more than a *scientific* or analytical tool; it is a *political weapon*, a deployment within the class struggle on behalf of the working class. Hence we can read in the Afterword of the Second Edition of *Capital* how Marx considered himself and his own great theoretical achievement within the historico-political field of class struggle: 'The peculiar historical development of German society therefore forbids, in that country, all original work in bourgeois economy; but not the criticism of that economy. So far as such criticism represents a class, it can only represent the class whose vocation in history is the overthrow of the capitalist mode of production and the final abolition of all classes – the proletariat'.²⁵

Along with this invention of a new political language of classes and class struggle, which at the end will guide the proletariat and its intellectuals into a classless society, Marx discovered a new understanding of the modern 'civil' or 'bourgeois society'. While Marx – as he put it – had learned the new political language of classes from the bourgeois historians, the Thierrys,²⁶ Guizot

23 *MECW*, vol. 39, p. 62; *MEGA*² III/5, p. 76.

24 *MECW*, vol. 42, p. 358.

25 *MECW*, vol. 35, p. 16, *MEGA*² II/6, p. 703.

26 In an 1854 letter to Engels, Marx mentions particularly Augustin Thierry (1795–1856) and calls him 'le père of the "class struggle" in French historiography' (*MECW*, vol. 39, p. 473; *MEGA*² III/7, p. 130). Yet, as we know from Foucault (2003, p. 226), Thierry not merely used the term 'struggle of classes' but the concept of a 'war of races' as well. For the historian Thierry, and this is interesting with regard to Marx, the history of a nation (France, England) has to be described as a *history of a war between two completely different and hostile 'races'*, the one oppressing the other. On this I refer to the illuminating article of Ekbach 2011.

and John Wade,²⁷ he acquired now a deeper understanding of the functioning of bourgeois society from reading the major political economists of the day – Adam Smith and David Ricardo (again). It is in this period that Marx consciously entered a new field of knowledge. This field or type of knowledge determined and dominated the social and political thought of the whole nineteenth century: the science of political economy.²⁸ With the new vocabulary of ‘production’, ‘labour’, ‘exchange value’, ‘commodity’ etc., Marx begins to grasp the anatomy of bourgeois society, and seeks to decipher its main secrets: namely, that although this modern society is antagonistically divided into irreconcilable and hostile classes, it is at the same time a whole and well-functioning social system, producing enormous social wealth and driving the development of the productive forces to the furthest limits. Wealth and poverty, bourgeoisie and proletariat, Capital and Labour are so deeply interwoven that they build a remarkable, but contradictory social unity.

With the new language of political economy, the new categories and concepts of *production*, *mode of production*, *means of production* etc. Marx claimed, not to write a new political economy, but to disclose direct and materialistic contradictions of this modern society in its totality. Hence we can already read about the new materialistic turn of his theory in the *German Ideology* that ‘This conception of history thus relies on expounding the *real process of production* – starting from the *material production* of life itself – and comprehending the form of intercourse connected with and created by this *mode of production*, i.e., civil society – its various stages as the basis of all history; describing it in its action as the state and also explaining how all the different *theoretical productions* and forms of consciousness, religion, philosophy, ethics, etc. etc. and tracing the process of their formation from that basis, thus the whole thing can, of course, be depicted in its *totality* (and therefore, too, the reciprocal action of these various sides on one another).’²⁹

Let me now briefly summarise what I have said so far about Marx’s new materialistic theory, which sets out in 1845. From the very beginning, this new theory consists of two different elements or voices: on the one hand, we have a new political language of classes, and the necessity to develop it, *because the whole theory itself is in a sense inextricably part of the class struggle*. With the

27 Marx would read John Wade’s *History of the Middle and Working Classes* (1833) in Manchester. For the significance of Wade as a journalist and intellectual of the radical artisans see Thompson 1966, pp. 762–8.

28 For the birth of political economy at the end of the eighteenth century and its political and scientific hegemony in the nineteenth century, see Poovey 1998 and Bohlender 2007.

29 *MECW*, vol. 5, p. 53, my emphasis.

new political language Marx would be able to articulate a kind of *critique of politics*. That means: to analyse the complex socio-political movements of the modern classes and to determine and justify the required strategic deployment of the working class within the specific historico-political field of class relations and class struggle.

On the other hand, we have the language of that new science of political economy. Marx knew that he had to study that language intensively, and to be fluent in it; not least because for him, it represented the most advanced type of bourgeois knowledge, *the key science of civil society*. To decipher the mysteries of this society, that is to say, its contradictory coherence, and to disclose their historicity, their historical narrowness or bounded nature, it was necessary to develop a *critique of political economy*. For only this *critique* could enable the working classes to measure their real advancement toward a classless society.

Two languages, two critiques, two different intellectual tools forged only for one aim – to analyse *scientifically* and to revolutionize *politically* the bourgeois society. The interesting question here, I think, is how these two languages were related to each other. Is there a common bond or tie between them? Is not Marx's whole intellectual life dedicated to articulating that common bond, to finding a uniform grammar? Is it not here that we can detect the beginning of the 'unfinishableness' of Marx's project? If that is so, I argue, are we not – at the birth of these two languages, these two voices of critique – at the starting point of Marx's project? Turning now to Marx's encounter with Manchester, I hope to clarify why the Manchester Notebooks are helpful for an understanding of the very birth of this project.

Why Manchester?

In February 1845, Marx made a contract with the publisher Carl Friedrich Julius Leske for a scientific book in two volumes entitled *Kritik der Politik und Nationalökonomie*.³⁰ Yet – as is well known – Marx did not finish the book.³¹ He was expelled by the Prussian Government, and went to Brussels, where he continued his studies on politics and political economy – reading for instance Auguste

30 Engels announced the book in Robert Owen's *New Moral World* in March and May 1845, under the title *Review of Politics and Political Economy*.

31 He quarrelled with Leske for instance on the scientific character of the book: 'As to your query about its "scientific character", I replied that the book is scientific, but not scientific as understood by the Prussian government' (*MECW*, vol. 38, p. 48; *MEGA*² 111/2, p. 22).

Blanqui and Burets' influential *De la misère des classes laborieuses en Angleterre et en France* as well as McCulloch, Andrew Ure and Charles Babbage's *Economy of Machinery*.³² At that time, Marx was working with Friedrich Engels on another book project, namely the edition of a 'Bibliothek der vorzüglichsten sozialistischen Schriftsteller des Auslandes'.³³ It was in the context of that book project that (probably) Engels suggested to Marx a joint trip to Manchester, not only to study – in the famous Chatham Library – the political economists and socialist writers in their original language, but also to introduce Marx to the leading figures of Chartism, Owenism and radical socialism.³⁴

One can reasonably ask: why go to Manchester, rather than London with its British Museum? Actually, there were two good reasons for making the journey to Manchester. The first was simply a pragmatic one: Engels knew the city, and he knew it very well. From 1842 to 1844, he had lived in Manchester, and researched the city for the publication of one of his most important books: *The condition of the working class in England*.³⁵ The second reason, I think, was more crucial to Marx's project. More so than London, Manchester represented the boomtown of modern capitalism. If we can say that England was the centre of global capitalism at the time, then Manchester could justifiably be called the heart, or the metropolis of this global capitalism. A visitor to Manchester could gaze at the modern English cotton industry, the countless mills with their power-looms and spinning-frames; he or she could also marvel at the enormous store-houses, the international trading houses and the newly founded Manchester Exchange. The city was the lively and concentrated symbol of all that which Marx had so far learned about capitalism in his political economy books: a giant economic machine, which on the one hand produced a huge amount of social wealth, and on the other hand poverty, misery and death.³⁶ When Alexis de Tocqueville stopped in Manchester on his journey through England in 1835, he noted: 'From this foul drain, the greatest stream

32 Still a helpful outline of the reading of Marx between 1840 and 1853 is Rubel 1957.

33 Marx planned with Engels and Moses Hess a 'Library of the Best Foreign Socialist Writers', including Charles Fourier, Robert Owen as well as William Godwin and Henri de Saint-Simon. See Leopold 2007, p. 283.

34 It is most likely that Marx and Engels met at least Ernest Jones and George Harney as well as the leading figures of the London Section of the League of the Just, Karl Schapper, Joseph Moll and Heinrich Bauer. See Lattek 2006 p. 31. Lattek also assumes that Marx and Engels met Wilhelm Weitling who lived in London since September 1844.

35 I have done a close reading of the work in Bohlender 2008.

36 On the Victorian cities in the nineteenth century and the special case of Manchester, see Briggs 1968, p. 88.

of human industry flows out to fertilize the world. From this filthy sewer pure gold flows. Here humanity attains its most complete development and its most brutish; here civilization works its miracles, and here civilized man is turned back almost into a savage'.³⁷

About ten years later, armed with the inquiries of James Kay, Peter Gaskell and the latest statistical literature on the living and working conditions of the labouring population in Manchester (the famous 'blue books' of the commissioners and inspectors, which Marx would use extensively in *Capital*) Friedrich Engels wrote: 'Such is the Old Town of Manchester, and on re-reading my description, I am forced to admit that instead of being exaggerated, it is far from black enough to convey a true impression of the filth, ruin, and uninhabitable-ness, the defiance of all considerations of cleanliness, ventilation, and health which characterise the construction of this single district, containing at least twenty to thirty thousand inhabitants. And such a district exists in the heart of the second city of England, the first manufacturing city of the world. If any one wishes to see in how little space a human being can move, how little air – and *such* air! – he can breathe, how little of civilisation he may share and yet live, it is only necessary to travel hither ... Everything which here arouses horror and indignation is of recent origin, belongs to the *industrial epoch* ... the industrial epoch alone has crammed into them the swarms of workers whom they now shelter; the industrial epoch alone has built up every spot between these old houses to win a covering for the masses whom it has conjured hither from the agricultural districts and from Ireland; the industrial epoch alone enables the owners of these cattlesheds to rent them for high prices to human beings, to plunder the poverty of the workers, to undermine the health of thousands, in order that they *alone*, the owners, may grow rich. In the industrial epoch alone has it become possible that the worker scarcely freed from feudal servitude could be used as mere material, a mere *chattel*; that he must let himself be crowded into a dwelling too bad for every other, which he for his hard-earned wages buys the right to let go utterly to ruin. This manufacture has achieved, which, without these workers, this poverty, this slavery could not have lived'.³⁸

37 Tocqueville 1958, p. 107.

38 *MECW*, vol. 4, pp. 354. One could say that reading Engels's *Condition* was in fact Marx's first encounter with Manchester. He must have been very impressed by it, because years later, while writing the chapter on 'The working-day' in *Capital*, he writes to Engels: 'What I have now "inserted" supplements your book (*sketchily*) up to 1865 (and I say so in a note) and fully justifies the discrepancy between your estimation of the future and what will actually happen. Therefore, as soon as my book appears, it is necessary to have a second

We can conclude that, if one was eager to learn about the capitalist mode of production and its social effects, if one wanted to know what ‘class’ and ‘working class’, ‘proletariat’ and ‘class struggle’ in an age of industrial capitalism really meant, one had to come to Manchester – the metropolis of the Chartists and Owenites as well as the city of the Anti-Corn-Law League, the free-traders and their ‘Manchester School’ of political economy. When Marx and Engels later use the term ‘empirical reality’ in the *German Ideology* again and again to criticise the ‘philosophical speculations’ of the Young Hegelians, when both talk of their detachedness and abstract reasoning, and the need for a positive science to capture the social reality – then this might surely be ascribed to the experiences of the Manchester trip.³⁹

The Encounter

I say ‘might be’, because we know almost nothing about Marx’s and Engels’s trip to Manchester and what they did there during their stay – except, of course, for what they read in the library.⁴⁰ Marx’s Manchester Notebooks of 1845 give evidence to my assumption of the twofold character of Marx’s project: with

edition of your book, which will be easy in the circumstances. I shall provide the necessary theory’ (Marx, *MECW*, vol. 42, p. 224).

39 At least the theoretical impact of the Manchester experience of Friedrich Engels is warranted: ‘In Manchester it had been tangibly brought home to me that the economic facts which have so far played no role or only a contemptible one in historiography are, at least in the modern world, a historical force; that they form the basis for the emergence of the present-day class antagonisms that these class antagonisms, in the countries where they have become fully developed by dint of large-scale industry, hence especially in England, are in their turn the basis for the formation of political parties, party struggles, and thus of all political history’ (Engels in *MECW*, vol. 26, p. 317; *MEGA*² 1/30, p. 96). This theoretical impact has been traced more closely by Stedman Jones 2006.

40 If they had actually, as Lattek 2006, p. 31 argues, met Weitling and the leaders of the League of the Just (Schapper, Moll, Bauer) during their stay in Manchester, then Marx and Engels might have been involved in a seminal strategical discussion on the conception of ‘communism’. According to the documents of the League of this period (February 1845 to January 1846), there has been an intensive dispute between Weitling and Schapper, Bauer, Kriege and others concerning the questions: What kind of ‘revolution’ is necessary, and do we need a violent revolution at all? Who is the subject and addressee of communism (workers, criminals, prostitutes, vagabonds, intellectuals, philanthropists etc.)? One could say that at this time the League stood at the crossroads, either following the revolutionary course of Weitling, who demanded immediate revolutionary actions (theft, riots), or the more peaceful and pedagogical course of Schapper, who saw communism realised only by

regard to the elaboration of a prospective *Critique of Politics* Marx read Cobbett and Carlyle; he studies John Wades's *History of the Middle and Working Classes* of 1833 intensively and Frederick Morton Edens's standard statistical book on *The State of the Poor: or, An History of the Labouring Classes in England, from the Conquest to the Present Period*. To be up to date on the issues of the liberal reform movement of the time, particularly the Poor Law Amendment Act, the Ten Hours Bill, the Public Health and the Corn Law issue, Marx works his way through a wealth of political essays, pamphlets, surveys, inquiries etc.⁴¹ This doubtlessly marks a central step in the birth of Marx's historico-political analysis and new political language. A critique of politics had surely to be informed about the current state of the political art, had to know what is going on in the political battlefield – between, in this case, Tories, Whigs and the working classes – concerning child labour, sanitary and housing conditions, workhouses and the free trade of corn (the basic food of the working classes).

Where a *critique of political economy* is concerned, however, Marx is reading McCulloch, Nassau Senior, Cooper, Atkinson and a recently published essay by the young John Stuart Mill on *Some Unsettled Questions of Political Economy*. Besides the writings of the radical Tory Michael Thomas Sadler, Marx excerpts from the *Inquiry into the principles of the distribution of wealth* written in 1824 by the famous radical left thinker William Thompson. Together with Thomas Hodgskins's *Labour defended Against the Claims of Capital* from 1825,⁴² it is the first elaborated work of a so-called 'popular political economy',⁴³ criticising for the first time the injustice and inequality of modern society on the basis of a Lockean Natural Law Theory and a more Smithian value theory of labour.⁴⁴

hard educational work and in a far distant future. The debates are recorded in *Der Bund der Kommunisten* 1983, pp. 214–38.

- 41 On this liberal reform movement and the concomitant 'governmentalisation of the state', see Bohlender 2007, p. 260.
- 42 Marx will read Hodgskin later in London (1850–3). See *MEGA*² IV/8, pp. 549–62.
- 43 For a well-founded history of this 'popular political economy', see Thompson 2002 and McNally 1993, pp. 106–38.
- 44 It is worth noting here that Marx produced extensive excerpts of the works of Robert Owen in Manchester. His reception is nevertheless mostly concentrated on Owens's moral theory of education and his whole ethico-political concept of a 'new moral world', a utopian communism. On this, see my Introduction to *MEGA*² IV/5, Bohlender 2015. Probably with Owen in mind, Marx has written down the following passage of the *German Ideology*: 'Communism is for us not a *state of affairs* which is to be established, an *ideal* to which reality [will] have to adjust itself. We call communism the *real movement* which abolishes the present state of things. The conditions of this movement result from the now existing premises' (*MECW*, vol. 5, p. 49).

In *Capital* Marx notes briefly, yet with a mark of respect and appreciation about these – later falsely called⁴⁵ – Ricardian Socialists, that '[t]he English factory workers were the champions, not only of the English, but of the modern working-class generally, as their theorists were the first to throw down the gauntlet to the theory of capital'.⁴⁶ In a sense, Marx recognised his precursors here, because they were the first who produced an autonomous, critical and scientific language against the bourgeois political economy, the first to enter into the discourse of political economy to strike against bourgeois knowledge with its own weapons. Where classical political economy with all its scientific instruments seems to demonstrate to the working classes that they were just a commodity, sometimes necessary for the market, sometimes nothing but redundant population, William Thompson, Thomas Hodgskin, John Gray and John Francis Bray turned the tables and proved with their economic analyses of the production and distribution of wealth the redundancy of the capitalist classes.

The reason why it might be justified to speak here of a starting point for Marx's project lies exactly in this 'first' encounter. In Manchester, Marx faced a group of intellectuals who were already engaged in both: a *political struggle* against the capitalist classes, and a *theoretical struggle*, an endeavour to articulate the interests and claims of the labouring classes scientifically, that is to say, on the discursive level, and in the shape of the most advanced social and political science of the day. What must have been impressive for Marx was this combination, this intertwining of *theory and politics*. Because what else is this book named *Capital*, but the revolutionary attempt to give the political struggle of the working class the best and appropriate theoretical language? It is the attempt to inscribe something like a 'critical dispositif'⁴⁷ into the political discourses and practices of the workers' movement. Alas, and this is what Marx constantly laments during his life-long political engagements, either the working classes and their intellectuals (the socialists, chartist, communists, anarchists, social democrats and so on) ignored his great achievement, his scientific revolution completely, or – what might be worse – they misunderstood its revolutionary message and insights (consciously or not).

45 On the misreading of this group of British socialists as 'Ricardians', see already Claeys 1987, Thompson 2002, pp. 82–111 and especially Hoff 2008, p. 22.

46 *MECW*, vol. 35, pp. 303; *MEGA*² 11/9, p. 258.

47 This term I have borrowed from Jacques Rancière (2007, p. 24); it means for the time being not more than a *critical insight* into the totality of the capitalist mode of production and a *kind of mechanism* to destroy – as Marx puts it – the 'theoretical belief in the perpetual necessity of the existing conditions' (Marx, *MECW*, 43, p. 69).

The Bray Excerpt

It can be stated, therefore, that in Manchester, Marx met those theorists (at least two of them) who – as he put it – ‘were the first to throw down the gauntlet to the theory of capital’. He encountered a group of British socialists who were thrashing out, so to speak, a *class struggle in theory*. Yet it was not William Thompson but John Francis Bray and his political pamphlet *Labour’s Wrongs and Labour’s Remedy: Or, the Age of Might and the Age of Right*, that must have been most intriguing for Marx.⁴⁸ His excerpt of the little book comprises about 60 printed pages (which means a third of the text!) – while in contrast, the excerpt of Thompson’s extensive work of about 600 pages adds up to not more than ten pages.

John Francis Bray (1809–97) was a fascinating figure,⁴⁹ the last of those left-wing British intellectuals who started out as Unionists, Chartists and Owenites, and then moved more and more in the direction of a radical and revolutionary socialism. *Labour’s Wrongs* – published in 1839 – indicates this movement; here we find all the central topics of the British Left (natural law theory of social equality and justice) of the preceding period, but now rhetorically radicalised, sharpened and – most notably – supplemented with a critical political economy. But *Labour’s Wrongs* reveals yet another interesting point. With just one glimpse at the text, one can easily notice that Bray worked on the same problem, at the same political and theoretical construction site, as Marx did at that time. How is it possible to connect a *critique of politics* systematically with a *critique of political economy*? How could one turn the science of political economy into a political weapon to prove the class-based and oppressive character of the modern society as a whole social system?

In this regard, we find already at the beginning of Bray’s book the following passage – a passage Marx carefully translated: ‘By thus going to the origin of the thing, we shall find that every form of government, and every social and governmental wrong, owes its rise to the existing social system – to the institution of property as it at present exists – and that, therefore, if we would end our wrongs and our miseries at once and for ever, THE PRESENT ARRANGEMENTS OF SOCIETY MUST BE TOTALLY SUBVERTED ...’.⁵⁰ Bray is searching

48 For a more detailed analysis of the Bray excerpt, and its impact on Marx’s critique of political economy, see Bohlender 2013.

49 A good biography of Bray’s life and times is Bronstein 2009.

50 Bray 1839, p. 17. In the following, I will quote in the footnotes all the corresponding German passages in Marx’s Notebook from *MEGA*² IV/5. ‘Wenn wir zum Ursprung der Dinge fortgehn, werden wir finden, daß jede Form der Regierung, u. jedes sociale u.

for the origin of the miserable and oppressive state the labouring classes are in; and he ascribes it not to the government, to the political class or to a lack of political reforms of society – as Unionists and Chartists would have done; he ascribes the wrongs instead to the whole structure of the ‘existing social system’. The ‘Tyranny’, as Bray says, and Marx wrote it down in his notebook, ‘arises from the same source – the division of society into classes and castes’.⁵¹ To get rid of this class-divided structure of society is not a matter of politics, of establishing a republican state, rule of law or a democratic reformation, but of a – Marx would say – ‘social revolution’, whereas Bray speaks of ‘total subversion’.⁵²

As with Marx, however, Bray is not satisfied with a mere *critique of politics* – even if this critique is articulated in a radical language of class struggle. He takes a step forward, and seeks to underpin the critique of politics with the new science of political economy. Even though, he states, the founders of this science have apparently demonstrated that poverty and misery will always be the destiny of the working man, this science contains the true principles of society; it holds the elements to show that poverty and misery are exclusively the effect of the ‘present social system’ and not necessarily ‘the concomitant ... under any and every social system’.⁵³ What must have been striking for Marx and his project is Bray’s attempt to develop a *critique of political economy* on the basis of one of Marx’s later arguments, which formed a central part of his ‘critical dispositive’: namely, the historicity and particularity, the historical narrowness and boundedness of the ‘present social system’. He, therefore, excerpted the following passage carefully: ‘By thus fighting them [the political economists] upon their own ground, and with their own weapons, we shall avoid that senseless clatter respecting “visionaries” and “theorists”, with which

gouvernementale Leiden, schuldet seinen Ursprung dem existirenden socialen System – der Institution des Eigenthums, wie es gegenwärtig besteht – u. daß daher, wollen wir unsere Leiden u. Elend auf einmal u. für immer enden, die gegenwärtigen arrangements der Gesellschaft vollständig umgestürzt werden müssen’ (MEGA² IV/5, p. 10).

51 Bray 1839, p. 20. ‘Tyrannei ist dieselbe durch die ganze Welt u. sie kömmt alle von derselben Quelle, der Theilung der Gesellschaft in Klassen und Kasten’ (MEGA² IV/5, p. 10).

52 Later, in his dispute with Proudhon in *The Poverty of Philosophy*, Marx clearly distinguished between both conceptions: a politics of subversion seems to him a reformist strategy, a politics of small steps and long transitional phases (co-operative production, Labour Exchanges), while a revolutionary practice emerges from the driving contradiction and antagonism of capitalist society (class struggle) and leads to the abolition of the class structure of that society.

53 Bray 1839, p. 41.

they are so ready to assail all who dare move one step from that beaten track which, "by authority", has been pronounced to be the only right one'.⁵⁴

A serious criticism of the present society and a serious socialism requires a scientifically informed and substantiated theory to be successful in striking the bourgeoisie 'upon their own ground'. In contrast to the utopian socialist (Owen, Cabet) but also in strong opposition to Weitling – as I have mentioned above – Marx learned from Bray the lesson that the working classes need not only a political language and imageries, but a scientific social doctrine. Now, we find the theoretical centre of Bray's criticism of society and political economy in the concept of the well-known 'unequal exchange' between the labourer and capitalist. According to the principles of political economy, this exchange must be a mutual and above all an equal one; by exchanging a certain quantity of labour for money, both contractors should exchange on the basis of equal labour times: any hour of one specific labour is equal to any other hour. Yet, in the present social system, Bray complains, there is no equal exchange between labourer and capitalist – not even an exchange at all. 'By the present unjust and iniquitous system, exchanges are not only not mutually beneficial to all parties, as the political economists have asserted, but it is plain, from the very nature of an exchange, that there is, in most transactions between the capitalist and the producer ... no *exchange* whatever ... The whole transaction, therefore, plainly shews, that the capitalists and proprietors do no more than give the working man, for his labour of one week, a part of the wealth which they obtained from him the week before, which just amounts to giving him *nothing* for *something*'.⁵⁵ From Brays' point of view, the pretended equal exchange is nothing but a 'legalised robbery', as he called it, and the big rogue of this robbery is the capitalist, the capitalist class. In the history of the natural exchange of goods, the capitalist has gained a *wrong* position from which

54 Bray 1839, p. 41. 'Dieß soll durch dieselben Prinzipien u. in derselben Argumentationsweise bewiesen werden, wodurch die politischen Oekonomen, nicht weit genug gehend, das Gegentheil bewiesen haben. So sie bekämpfend auf ihren eignen Grund u. Boden u. mit ihren eignen Waffen, werden wir abwehren das sinnlose Geschnatter von "Visionairen" u. "Theoretikern"' (*MEGA*² IV/5, p. 15).

55 Bray 1839, p. 49. 'Durch das gegenwärtige System, sind Austausch nicht allein nicht gegenseitig vortheilhaft für alle Partheien ... sondern es ist sicher ... daß in den meisten Transaktionen zwischen Kapitalist u. Producent ... gar kein Austausch stattfindet ... Die ganze Transaktion zeigt daher klar, daß die Kapitalisten u. Eigenthümer nichts anderes thun, als geben dem Arbeiter für seine Arbeit von Einer Woche, einen Theil des Reichthums welchen sie von ihm (dem Arbeiter) die Woche zuvor erhalten haben, welches grade darauf hinausläuft ihm nichts für etwas zu geben' (*MEGA*² IV/5, p. 18).

he/she could distort and invert the natural, mutually beneficial, and equal exchange of the worker's products.⁵⁶

At first sight, it seems that with the idea and notion of a *legalised robbery* we have now arrived at the very (starting) point, the point where the *critique of politics* and the *critique of political economy* converge, and the political language of class division and subversion/revolution find its scientific justification and endorsement. It is the very point where in Marx's later conception two critical terms will appear, or put differently, where Marx will split up the term *robbery* in two: *surplus value* and *exploitation*. While the first one belongs to the discursive field of a scientific *critique of political economy*, the latter one is used in a political-polemical sense and therefore belongs to a *critique of politics*. Marx excerpts the following passage, which summarises Bray's whole argumentation: 'Under the present social system, the whole of the working class are dependent upon the capitalist or employer for the means of labour; and where one class, by its position in society is thus dependent upon another class for the MEANS OF LABOUR, it is dependent, likewise, for the MEANS OF LIFE; and this is a condition so contrary to the very intention of society – so revolting to reason, to justice, to natural equality of rights – that it cannot for one moment be palliated or defended.'⁵⁷ There is only one conclusion left: this irrational society must be totally subverted; it must be, from Bray's point of view, rationalised and restored to its natural state.

Yet Marx was not really convinced of Brays' solution. Only two years later, Marx dismissed the idea of a 'robbery' or 'unequal exchange' as the missing link of both critiques, both languages and voices. In his *Poverty of Philosophy*, Marx settled his accounts not only with Proudhon, but also with Bray, whom he cited extensively. According to Marx, Bray was the original writer; he was the first to recognise the problem, and apparently found a solution (robbery). Proudhon, in contrast, seemed to be just a plagiarist. The errors of both men, however, were the same: they both took the crucial principle of modern bour-

56 A revealing account of Marx's critique of Bray's and Proudhon's 'market socialism' is McNally 1993, p. 150.

57 Bray 1839, p. 52. 'Unter dem gegenwärtigen socialen System hängt die Gesamtheit der Arbeiterklasse von den Kapitalisten oder Anwendern\employers der Mittel der Arbeit ab; u. wo eine Klasse, durch ihre gesellschaftliche Position, so abhängig von einer andern Klasse für die *Mittel der Arbeit* ist, (means of labour) ist sie abhängig gleicherweise für die *Mittel des Lebens* (means of life); u. dieß ist eine Lage, so entgegengesetzt der wahren Intention der Gesellschaft, so revoltirend für die Vernunft, Gerechtigkeit, natürliche Gleichheit der Rechte, daß sie keinen Augenblick beschönigt od. vertheidigt werden kann' (MEGA² IV/5, p. 19).

geois society, the law of motion of the capitalist mode of production, as the *normative measure or rule not only for the criticism of that society but as a basis for a new political economy and new organisation of society*. Individual exchange of commodities in this society, Marx points out to Bray and Proudhon, is regulated on the basis of equal labour times (the law of value), yet the fluctuating and oscillating movements of a competitive capitalist (labour-)market are the mechanisms through which the individual exchange operates and the law of value asserts itself. Consequently, one cannot have individual exchange of commodities based on the rule of equal labour times without the mechanisms and effects of a capitalist (labour-)market system (overproduction, depreciation, unemployment, stagnation) and – as Marx goes on – one cannot accept a competitive market system without approving its capitalist mode of production and its appropriated social structure of domination (class relations, property relationships). ‘In general, the form of exchange of products corresponds to the mode of production. Change the latter, and the former will change in consequence. Thus in the history of society we see that the mode of exchanging products is regulated by the mode of producing them. Individual exchange corresponds to a definite mode of production which itself corresponds to the class antagonism. There is thus no individual exchange without the antagonism of classes.’⁵⁸

Scientifically spoken this means: in a modern bourgeois society determined by the capitalist mode of production, a thing such as ‘unequal exchange’ or ‘robbery’ does not exist!⁵⁹ At least, it is not the *theoretical* lever where a radical

58 *MECW*, vol. 6, pp. 143.

59 Later on, in the *Grundrisse*, Marx sharpened the point that, in the process of exchanging commodities, there is no violation of equality and freedom: ‘Thus, if the economic form, exchange, in every respect posits the equality of the subjects, the content, the material, both individual and objective, which impels them to exchange, posits *freedom*. Hence equality and freedom are not only respected in exchange which is based on exchange values, but the exchange of exchange values is the real productive basis of all *equality* and *freedom*’ (*MECW*, vol. 28, p. 176; *MEGA*² 11/1.1., p. 168). In *Capital*, then, he talks of the circulation sphere as ‘in fact a very Eden of the innate rights of man. There alone rule Freedom, Equality, Property, and Bentham’ (*MECW*, vol. 35, p. 186; *MEGA*² 11/5, p. 128). Even when he describes the appropriation of unpaid labour time, that is the production of *surplus value*, he seeks to articulate the so-called valorisation process in a ‘non-political’ or ‘amoral’, scientific language: the appropriation of the specific use value of labour power, he says, ‘is, without doubt, a good piece of luck for the buyer [of labour power], but, *by no means, an injury to the seller* ... Every condition of the problem is satisfied, while the laws that regulate the exchange of commodities, have been in *no way violated*. Equivalent has been exchanged for equivalent’ (*MECW*, vol. 35, p. 204; *MEGA*² 11/5, p. 143; emphasis added).

critique of political economy has to be applied. The term 'Robbery' could only be used in the context of a political language of class struggle, similar to the use of the word 'wage-slavery',⁶⁰ for instance. In any case, a scientific critique of political economy on the basis of these concepts would amount to nothing. Ricardo's law of value turned out to be not the springboard into a just and equal society, but its direct opposite; or as Marx put this disillusioning insight: 'Mr. Bray turns the *illusion* of the respectable bourgeois into an *ideal* he would like to attain. In a purified individual exchange, freed from all the elements of antagonism he finds in it, he sees an '*equalitarian*' relation which he would like society to adopt generally. Mr. Bray does not see that this equalitarian relation, this *corrective ideal* that he would like to apply to the world, is itself nothing but the reflection of the actual world; and that therefore it is totally impossible to reconstitute society on the basis of what is merely an embellished shadow of it. In proportion as this shadow takes on substance again, we perceive that this substance, far from being the transfiguration dreamt of, is the actual body of existing society'.⁶¹



At this point, I will conclude my discourse on Marx's journey to Manchester and the notebooks he produced there. When Marx met Manchester in 1845, he was theoretically and politically at a point of departure that would lead him to his great achievement in 1867. One can perhaps say that the experience of Manchester set him on a specific track – the track of the two different languages, as I have called it, and the issue of connecting or joining them. It seems that in Manchester, Marx became aware of the radical antagonism

60 The term 'wage slavery' is deeply rooted in a *political*, especially a *republican* language of critique. One can already read in Cicero's *On Duties* the following famous topos: 'Again, all those workers who are paid for their labour and not for their skill have servile and demeaning employment; for in their case the very wage is a contract to servitude' (Cicero 1991, p. 58). The point here is not that the wage-labourer is the subject of an economic 'exploitation'; rather, he/she is considered as a politically unfree and *dependent* subject, subdued to the rule of his/her master/employer. Hence, by virtue of this 'slavish' status or relationship, he/she could not be part of a free commonwealth or republic. Obviously, Bray uses parts of this political language when he refers to the *dependency* of the working class upon the capitalist class in their 'means of life'; see the quotation above (Bray 1839, p. 52). A significant historical account of the issue of slavery and wage-labour in the workers' movement of the nineteenth century, particularly in the United States, is now offered by Gourevitch 2014.

61 *MECW*, vol. 6, p. 143.

of classes in a modern bourgeois society and of the need to elaborate this antagonism in a language of class struggle, revolution and classless society (as he puts it in the letter to Weydemeyer in 1852). Similarly, Manchester was a focal point of a theoretical struggle on political economy – the most advanced science of the bourgeois society. By reading the so-called Ricardian socialists, especially – as I pointed out above – John Francis Bray's *Labour's Wrongs*, Marx encountered probably for the first time radical socialist thinkers of the working class with a project at hand that substantially resembled his own: manufacturing a *critique of politics*, a language of total subversion of bourgeois society paired with a *critique of political economy*, a scientific language – as he puts it in *Capital* – ‘to lay bare the economic law of motion of modern society’.⁶²

In the dispute with Bray's (and of course Proudhon's) market socialism,⁶³ his theory of equal exchange and labour theory of value, Marx might have become aware of what a *critique of political economy* really means – not to remain within the conceptual horizon of the categories of political economy, but to transcend this horizon, that is to say, to dismiss the epistemological premises of political economy (naturalness, universality) and to invent a new language with new concepts and categories (value-form, commodity-form, surplus value, abstract labour etc.). Yet, this new scientific language was never really linked or brought systematically in relation to the political and strategic language of revolution and classes. Where Bray had found the watchword ‘legalised robbery’ to unite both languages, Marx was compelled to use at least two different terms and languages (exploitation and surplus values); for the sake of a true and scientific critique of political economy⁶⁴ he needed at least two voices, which – as Maurice Blanchot has put it – not infrequently ‘collide and disarticulate themselves’. In this sense, we can say that the starting point of Marx's project was at the same time the birth of its ‘unfinishableness’.

62 *MECW*, vol. 35, p. 10; *MEGA*² 11/9, 17.

63 For a good and readable study on the historical and theoretical roots of ‘market socialism’, see McNally 1993.

64 With the same pride that Marx had formerly reported to Weydemeyer in 1852 on his three discoveries in the field of a *Critique of Politics*, he wrote to Engels in 1868 about the ‘three fundamentally new elements’ of his *Critique of Political Economy*: ‘1. that in contrast to all previous political economy ... I begin by dealing with the general form of surplus-value ... 2. that ... the labour represented by the commodity must also have a double character ... This is, in fact, the whole secret of the critical conception; 3. that for the first time wages are shown as the irrational outward form of a hidden relationship ...’ (*MECW*, vol. 42, p. 514).

Marx's Itineraries to *Capital*: On Matthias Bohlender's 'Marx Meets Manchester'*

Lucia Pradella

Marx's Encounter with Manchester

Aware of the importance of direct experience of British society, in July 1845 Marx went with Engels to Manchester – the capital of the industrial revolution and the metropolis of the Chartists and Owenites, and also of the Anti-Corn-Law League and the Manchester School (see Bohlender this volume). In their six-week journey, they met leaders of the labour movement and devoted themselves to the study of political economy and British socialism. Marx's and Engels's Manchester Notebooks are a unique example of their joint research. *MEGA*² IV/4 comprises five of the nine notebooks by Marx, along with Engels's three notebooks, which are the only signs of his preparatory work for Engels's planned book on England's social history. With the publication of volume *MEGA*² IV/5, all Manchester Notebooks are now available. This opens new possibilities for tracing a crucial phase of Marx's and Engels's intellectual and political elaboration.¹

For Matthias Bohlender, Marx's Manchester Notebooks represent a real turning point, if not the *starting* point of Marx's critique of political economy. The encounter between Marx and Manchester gave his project a decisive turn in a materialist and political direction. While not fully agreeing with Louis Althusser's thesis of an epistemological break, Bohlender argues that 'the years from 1845 to 1848 were decisive years of change and transformations', that witnessed 'the birth of what will become his lifelong political and scientific project of a *Critique of Political Economy*'. In this period, Marx abandoned his former philosophic-anthropological approach, and sought to elaborate a materialistic theory of history and society. A decisive role in this development had his discovery of the modern concept of 'classes', 'class struggle' and 'class relations', and

* These comments partially draw on chapter 3 of my book *Globalization and the Critique of Political Economy* (2014). When the text of Marx's notebooks is originally in English, I have indicated this by putting these words in bold.

1 *MEGA*² IV/4, pp. 31*, 47*.

his acquaintance with the science of political economy. As Marx argues in his letter to Weydemeyer (5 March 1852), if the bourgeois economists had already formulated the concepts of classes and class struggle, his elaboration of the materialist conception of history and his study of political economy allowed him to identify the interrelation between the class struggle and specific phases of historical development, and to recognise the role of the dictatorship of the proletariat in the transition to a classless society.²

But why, according to Bohlender, was it in Manchester that Marx started his project of critique of political economy? First, he argues that Marx's Manchester Notebooks would 'mark the birth of the historico-political analysis' of class relations and of the class struggle. Second, Marx's study of the so-called Ricardian socialists was decisive, 'because they were the first who produced an autonomous, critical and scientific language against the bourgeois political economy, the first to enter into the discourse of political economy to strike the bourgeois knowledge with its own weapons'. British socialists were engaged both in a *political struggle* against the capitalist classes, and in a *theoretical struggle* against classical political economy.

In my view, Matthias Bohlender rightly stresses the importance of Marx's journey to Manchester, but his argument fails to contextualise the Manchester Notebooks within Marx's broader intellectual trajectory, and fails to identify elements of continuity and discontinuity within it. In this comment, I therefore want to put Marx's Manchester Notebooks in perspective. I show that Marx started engaging with the concept of classes already in Kreuznach (1843). Even though Marx formulated his project of a 'critique of politics and national economy' only at the beginning of 1845, the starting point of this project dates back to Paris and Brussels. Also, thanks to his encounter with socialist and communist militants and thinkers, it was there that Marx started his historical and political study of the condition of the working class, and deepened his understanding of the labour theory of value in the light of the socialist critique of classical political economy. Marx's encounter with Engels, and thus, indirectly, with Manchester, played a central role in this development. In order to contextualise the Notebooks of Manchester, and understand the importance of the Bray extracts (Section 3), in Section 4 I present Marx's draft article on Friedrich List's *The National System of Political Economy* (1841), written in the course of 1845 in the light of his Paris, Brussels, and Manchester Notebooks. In the last section, I offer some conclusions.

2 *MECW*, vol. 39, p. 62; *MEGA*² III/5, p. 76.

Kreuznach to Paris and Brussels

Marx's engagement with the concept of classes dates back to his studies in Kreuznach, where he moved to rethink his relationship with Hegel. These studies resulted in a number of writings, such as the Kreuznach Notebooks, the letters to Arnold Ruge, the 1843 manuscript *Contribution to the Critique of Hegel's Philosophy of Right, On the Jewish Question* and the *Introduction* to his critique of Hegel (1844). Marx's five Kreuznach Notebooks, published in MEGA² IV/2, are focused on the French Revolution,³ and the relationship between state and civil society. The second notebook deals with the issue of private property, relations between classes, and between executive and legislative power. Some keywords highlighted in the index of the notebook ('Structure of the feudal regime', 'Relation of the three estates before the revolution', 'Property and its consequences')⁴ show Marx's attempt at tracing the connection between property and class interests. Indeed, he underlined a passage from Rousseau's *Social Contract*, arguing that the law is only useful to property-owning classes,⁵ and analysed the relation between general will, individual will, and private interest. Marx also investigated the influence of the various classes in the revolution, during which the principle of equality became a subject of bitter controversy.

Through these studies, Marx became aware of the inability of the bourgeois revolution and the parliamentary system to achieve concrete freedom. In his letter to Arnold Ruge of 3 September 1843, written after completing the five notebooks, Marx defined the representative system as the political expression of the domination of private property.⁶ This view informs the unfinished manuscript *A Contribution to the Critique of Hegel's Philosophy of Right*, in which Marx reflects on the necessary conditions for realising concrete freedom, conceived of as the identity of particular and universal interests. Marx identified private property as the root of all divisions in bourgeois society. Marx's critique of Hegel thus gave a strong impulse to his critique of political economy. Developing such a critique became Marx's main objective in Paris, in particular from the beginning of 1844. Marx was pushed in this direction also by his encounter with communist and socialist militants, and by his reading of the 'Outlines of a Critique of Political Economy' by Friedrich Engels who, at the time, worked and was based in Manchester. Marx and Engels met in Paris in

3 MEGA² IV/2, pp. 156–62, 163–8.

4 MEGA² IV/2, p. 116.

5 MEGA² IV/2, p. 93.

6 MECW, vol. 3, pp. 141–5; MEGA² III/1: 54–7.

September 1844, and began their lifelong friendship and collaboration. It was therefore via Engels that Marx's first encounter with Manchester took place.

In order better to situate Marx's and Engels's Manchester Notebooks and their study of the British socialists, we need to bear in mind that, for them, *all* early socialists and communists recognised the existence of class antagonisms, but not the material conditions for the emancipation of the proletariat and its independent political role. This recognition, in turn, presupposed the emergence of the proletariat as an autonomous political force.⁷ As discussed in the rest of this section, Marx's Paris and Brussels Notebooks not only contain his studies of classical and national political economy,⁸ but also those of the socialist and communist literature, and of the history of political economy.⁹

Classical and National Political Economy

At the stage of his Paris writings, as Bohlender affirms, Marx developed a philosophical critique of classical political economy. Even though he did not adopt the labour theory of value, however, Marx nevertheless highlighted some of the contradictions of classical political economy, questioning it in the light of his critique of bourgeois class relations. He saw classical political economy essentially as an expression of the interests of private property, which the economists assumed as a natural fact, thus running into unresolvable contradictions. For Marx, on the contrary, private property had no independent existence: it derived from the alienation of workers from their activity and their species being,¹⁰ which gave rise to all reversals in capitalist society.

In his Paris Notebooks, probably written between the end of 1843 and the beginning of 1844, Marx criticised some of the contradictions of the classical economists. He questioned Smith's explanation of the division of labour on the basis of exchange, which presupposed the division of labour in its turn.¹¹ He excerpted some passages from the *Wealth of Nations* that make it clear that free trade was functional to British manufacturing interests and had positive effects on the rate of profit,¹² and he criticised Say's Law and its implication that general crises are impossible. Marx accepted Ricardo's theory of net income,

7 *MECW*, vol. 6, p. 515.

8 *MEGA*² IV/2, pp. 301–492, 503–48.

9 *MEGA*² IV/2, pp. 551–79, and *MEGA*² IV/3.

10 *MEGA*² IV/2, pp. 455–6.

11 *MEGA*² IV/2, pp. 332, 336, 416.

12 *MEGA*² IV/2, p. 476.

according to which the gain of a country consists of the gains of capitalists and landlords: by 'nation', in Marx's view, Ricardo only meant the members of these two classes, whose homeland coincided with their property.

By denying the existence of a unitary national interest, Ricardo had allowed understanding of the international movement of capital, revealing that political economy is the science of private enrichment. In their critiques of Ricardo, Say and Sismondi were just trying to oppose the cynical expression of an actual truth, without questioning the inhuman system that was its cause.¹³ While underlining the merits of Ricardo, Marx criticised Ricardo's naïve lack of understanding of Say's distinction between profits from domestic and from foreign trade. In Marx's eyes it was *evident* that in international trade a nation could gain to the detriment of another.¹⁴

In his Paris Notebooks, therefore, Marx investigated the relation between classes, and the link between class- and inter-national relations. The *Economic and Philosophic Manuscripts* start by stating that 'Wages are determined through the antagonistic struggle between capitalist and worker'.¹⁵ Borrowing Althusser's terminology, the class struggle is thus certainly present 'in the practical state'. In the Preface to the *Manuscripts*, moreover, Marx assures the reader that his 'results have been attained by means of a wholly empirical analysis based on a conscientious critical study of political economy'.¹⁶

Marx, however, was unable to *explain* the antagonistic character of capitalist class and international relations: a question that will return constantly in his investigation. When he wrote the *Economic and Philosophic Manuscripts*, in fact, Marx had not yet explained the origin of alienation, which he assumed as an *actual* economic fact.¹⁷ What is more, he accepted Ricardo's theory of rent and the resulting iron law of wages – according to which the wage is continually pushed down to subsistence levels: a law that increasingly imposes itself with capitalist development and against which workers' coalitions are powerless.

In his Paris Notebooks, Marx also studied the works of German critics and supporters of classical political economy, such as Karl Wolfgang Christoph Schütz's *Grundsätze der National-Ökonomie* (1843), Friedrich List's *Das Nationale System der Politische Ökonomie* (1841), and Heinrich-Friedrich Osiander's *Enttäuschung des Publikums über die Interessen des Handels, der Industrie und*

13 MEGA² IV/2, p. 421.

14 MEGA² IV/2, p. 418.

15 MECW, vol. 3, p. 235; MEGA² I/2, p. 327.

16 MECW, vol. 3, p. 231; MEGA² I/2, p. 325.

17 MECW, vol. 3, pp. 271–2; MEGA² I/2, p. 364.

der Landwirthschaft (1842) and *Über den Handelsverkehr der Völker* (1840).¹⁸ At the time, Marx had not yet distinguished classical and national political economy, but he nevertheless counterposed List's and Osiander's views on classical political economy. Significantly, Marx already had a critical approach towards List's critique of classical political economy. He noted that, despite his affirmation that there was no difference in principle between the national and the international division of labour, List posited a fundamental separation between the two, and affirmed the primacy of the internal over the external market.¹⁹ For Marx, List's new theory of wealth, the theory of 'productive powers', did not overcome the antagonism between capital and wage labour; his mere re-description of the worker as a 'productive power' did not represent any progress on the 'so-called value theory', but only subjectivised value.²⁰

Socialist and Communist Literature, and the History of Political Economy

In Paris and Brussels, Marx read scholars like Eugène Buret, Simonde de Sismondi, De Chamborant, Adolphe Blanqui and François Villegardelle, the social-Catholic French politician and economist De Villeneuve-Bargemont, and other writings on the social question. One notebook is missing; it contained excerpts from Sismondi's *Nouveaux principes d'économie politique* (2nd ed., Paris, 1827), Xavier Droz's popular treatise of political economy and Antoine Elisée Cherbuliez's *Richesse ou Pauvreté* (Paris, 1841). Before leaving for Manchester, Marx also read Giuseppe Pecchio, François Louis Auguste Ferrier and Andrew Ure.²¹

Three main relevant points emerge from his notebooks: Marx's historical and political study of the condition of the working class; the deepening of his understanding of the labour theory of value, and his first in-depth study of the socialist critique of the 'industrial system'.

Marx devoted a great deal of attention to Eugène Buret, Sismondi's intellectual heir, and his *De la misère des classes laborieuses en Angleterre et en France* (1840): the most important popular work on the social question of the time, providing rich documentary material on Western Europe and North America. Buret affirmed the social character of poverty and distinguished this concept,

18 MEGA² IV/2, pp. 503–48.

19 MEGA² IV/2, p. 529.

20 MEGA² IV/2, pp. 529–30.

21 Ikker 1988, p. 224.

of 'material' nature, from that of misery, poverty perceived at the moral level. For Buret, misery is a contrast emerged with civilisation, and entails a fundamental class dimension: 'misery and its consequence have been the price of wealth'.²² In his notes from Buret's *Cours d'économie politique*, Marx focused on his analysis of absolute and relative poverty, and of the interdependence among its material and moral aspects.²³ He summarised the material on the growth of pauperism in urban and rural areas in different countries. Comparing the situation of the day labourers in England to that of the slaves in Jamaica, Buret argued that the former had the pain and humiliation but not the bread of slavery. He also delved into housing and health conditions, mortality and the dire condition of workhouses, hospitals and prisons. Marx annotated his reports on labour struggles, the legislative measures against workers' coalitions in France – starting from the 1791 loi Chapelier²⁴ – and the growing organisation of the proletariat. These studies contradict Bohlender's thesis that the Manchester Notebooks 'mark the birth of historico-political analysis' of class relations and of the class struggle.

Marx also read Simonde de Sismondi for the first time. Sismondi adhered to the labour theory of value, but criticised Smith's view of capitalism as harmonious.²⁵ In his *Nouveaux principes d'économie politique*, Sismondi analysed the interrelations between production of exchange values, capital concentration, impoverishment and crisis. In Sismondi's view, the structural problem of under-consumption of the working class pushed capitalism towards crisis, and forced it continuously to expand the market. Although Marx's notes on the *Nouveaux principes* are missing, in his excerpts from *Études sur l'économie politique* (1837) he annotated Sismondi's critique of the social consequences of the industrial system as well as his considerations on the emergence of a new class, the 'proletariat', whose miserable conditions endangered both society and the state.²⁶ Sismondi also denounced the violence and barbarism of modern colonisation, and its destructive consequences on colonised peoples. Significantly, Marx agreed with Sismondi that all progress is aimed at reducing the value and the compensation of labour,²⁷ but criticised Sismondi's concept

22 MEGA² IV/2, pp. 551–2.

23 MEGA² IV/2, pp. 551, 577.

24 MEGA² IV/2, p. 561.

25 Grossman 1924.

26 To Sismondi goes the credit of introducing the word 'proletariat' into the modern socio-economic literature, as representing 'a totally new being' (MEGA² IV/3, p. 124).

27 MEGA² IV/3, p. 123.

of a 'real trade' as well as his romanticised view of ancient colonisation.²⁸ Both Buret and Sismondi emphasised the dehumanising consequences of capitalism and the centrality of class struggle in history.²⁹

In Brussels, Marx also delved into the history of political economy (his sixth notebook of Brussels bears the title 'History of National Economy'). In the third and sixth Brussels notebooks, he excerpted François Louis Auguste Ferrier's *Du gouvernement considéré dans ses rapports avec le commerce* (Paris, [1805] 1822) and volume 1 and 2 of Charles Ganilh's *Des Systèmes d'économie politique* (Paris, 1809), reportedly the earliest history of economic ideas.³⁰ Marx later defined Ferrier and Ganilh as 'the economists of the Empire'³¹ and modern 'rehashers' of mercantilism.³² Marx also excerpted Giuseppe Pecchio's *History of political economy in Italy* (in its French translation: Paris, 1830), and some passages from a French translation of *A Discourse on the Rise, Progress, Peculiar Objects and Importance of Political Economy* (Edinburgh, 1824) by John Ramsay MacCulloch (1789–1864), discussing the monetary and mercantile systems, the Physiocrats, and classical political economists.

Marx in Manchester

Marx and Engels left for Manchester in July 1845. In Manchester, Marx continued his study of political economy, got in contact with leaders of the labour movement and had a chance to read in the original the works of British economists, including the so-called Ricardian socialists. His study of political economy can be divided into two main groups: the first consists of economists of the seventeenth and eighteenth centuries, such as Edward Misselden, William Petty, Charles Davenant and Robert Clavell. The second group includes representatives of post-Ricardian political economy: on the one side, the English socialists who tried to draw socialist conclusions from Ricardo's system; on the other side, the economists who rejected the labour theory of value, whom Marx would later define as 'vulgarisers' (e.g. John Stuart Mill, Nassau William Senior, Thomas Cooper, William Atkinson, and John Ramsay McCulloch).

28 *MEGA*² IV/3, p. 127, 204.

29 Grossman 1924, 1943; Levine 1987, pp. 432, 437.

30 Baksi 2001, p. 263.

31 *MECW*, vol. 31, p. 195; *MEGA*² II/3.2, p. 615.

32 Marx, 1976, p. 153; *MEGA*² II/10. p. 61.

Rather than being the starting point of Marx's critique of political economy, the Manchester Notebooks are informed by his increased attention to the theoretical aspects of political economy, in particular to specific questions like the relation between wage labour and capital, value and price, profit and the rate of profit, etc. Marx paid great attention to mercantilist scholars. He commented on Petty's and Davenant's reflections on the origins of wealth, which they traced back to labour and land,³³ and he became increasingly aware of the importance of trade and colonial expansion to manufacturing development. He delved into the question of the balance of trade, and noted several elements that he then presented systematically in *Capital*: the existence, in spite of their competition, of a common interest among European powers for the control of markets and colonies; the necessity of demographic regulation and of anti-poor laws for ensuring a sufficient labour supply for manufactures; the centrality of the protectionist and colonial systems, public debt, finance and taxation. Marx referred repeatedly to Engels's notebooks, and probably studied his notes on processes of rural expropriation in England, on the Poor Laws and various labour laws setting the maximum wage in the manufacturing period,³⁴ along with continuous workers' fights for the right to unionise.

Marx's study of the post-Ricardian economists helped him to deepen his analysis of the contradictions of Ricardo's system of political economy. From William Cobbett's *Paper against Gold, or The History and Mystery of the Bank of England* (London, 1828),³⁵ he summarised various passages on the importance of the Bank of England in the development of capitalism in Britain, and on the relationship between accumulation of assets and state debt. He also copied a series of tables on public debt and war spending.³⁶ Marx then studied the debate around Peel's Bank Act of 1844, and the polemic between the Currency Principle and the Banking School. He read Engels's notes from Thomas Tooke's *A History of Prices*, which proved to be Marx's most important source for the study of crises.³⁷ Despite being a follower of Ricardo, Tooke criticised the Currency Principle and showed the lack of direct connection between money circulation and prices. At the time, however, Marx did not follow Tooke's critique of the Currency Principle. He only drew the conclusion that crises of overproduction depended on the fact that the goal of capitalist production was

33 MEGA² IV/4, pp. 22, 28, 47.

34 MEGA² IV/4, p. 373.

35 MEGA² IV/4, pp. 209–32.

36 MEGA² IV/4, pp. 215–7, 219.

37 MEGA² IV/4, pp. 121–45.

profit rather than social needs.³⁸ In some passages, moreover, Marx criticised Ricardo's theory of comparative advantage for disregarding the centrality of costs of production at the international level³⁹ and he analysed Ricardo's theory of rent, to which Marx adhered.⁴⁰ The notebooks also show Marx's critical study of Malthus's theory of population.⁴¹ John Stuart Mill, in his view, was an example of the doubts and contradictions of these scholars. Cooper, Atkinson and Senior all understood the antagonism between landowners and capitalists, on the one side, and the working class on the other; they criticised Ricardo for his failure to explain the relation between value and price of production, without providing however any satisfactory solution.

Along with this in-depth analysis of political economy, in Manchester – as Bohlender underlines – Marx also studied the history of Chartism, and read English socialists such as Thomas Rowe Edmonds and William Thompson who, between the 1820s and 1840s, criticised the Ricardian system on the basis of the labour theory of value, seeking to draw favourable conclusions for workers.⁴² Since they identified labour as the only source of wealth, they proposed to divide the product in a way that ensured to workers their own product; **'labour must receive its full equivalent'**.⁴³ Marx criticised their proposed solutions,⁴⁴ and this prompted him to deepen his study of Ricardo. In his sixth and seventh notebooks of Manchester, Marx extensively summarised Robert Owen's works and, in particular, John Francis Bray's *Labour's Wrongs and Labour's Remedies* (1839). He annotated Bray's argument that the transaction between capitalist and worker was a 'palpable deception', 'a mere farce', where the real origin of profit laid. 'The whole transaction ... plainly shows that the capitalists and proprietors do no more than give the working man, for his labour of a week, a part of the wealth that they have received from him (the worker) the week before'.⁴⁵ Accumulation was entirely the product of labour. In Bray's view, English people were ready to transform society; the unions had shown the power of the working class. In the light of this criticism, as Bohlender discusses, Bray proposed the 'total subversion' of the social system. Such a 'total subversion', however, resolved itself into the proposal of the introduction of 'labour-money',

38 MEGA² IV/4, pp. 23*, 342.

39 MEGA² IV/4, p. 251.

40 MEGA² IV/4, pp. 175–9, 279.

41 MEGA² IV/4, pp. 102–3.

42 Mandel 1972, p. 45.

43 MEGA² IV/4, p. 239.

44 MEGA² IV/4, pp. 181, 241, 245.

45 From Bray, 1839, p. 49, 50; see MEGA², IV/4, p. 18.

i.e. an amount of banknotes corresponding to the labour necessary for the production of commodities, which Marx criticised in his *Poverty of Philosophy* as completely inadequate.⁴⁶

Marx concluded his sixth notebook of Brussels, which he completed after his return from Manchester,⁴⁷ with a study of the *Histoire des idées sociales avant la révolution française, ou les socialistes modernes* (Paris, 1846) by François Villegardelle, a survey of pre-1789 social ideas, and with excerpts from *The Facts and Fictions of Political Economists* (Manchester and London, 1842) by the one-time follower of Robert Owen, John Watts. In the excerpts from Villegardelle, Marx annotated Brissot de Warville's idea that the overwhelming majority of the people, being propertyless, had no fatherland, and did not belong to civil society. In order to restore their rights, they had to smash the entire state machine.⁴⁸ He also excerpted Watts's remark that 'if labour be the only source of wealth, its 'appropriation is the master curse of human nature'.⁴⁹

Marx's Draft Article on List

Marx's draft article on Friedrich List's book *The National System of Political Economy* (1841) is based on Marx's notebooks of Paris, Brussels, and Manchester. To understand when exactly the draft article was written in the course of 1845, as Christine Ikker remarked more than 25 years ago, more research is required in the light of the Brussels and Manchester Notebooks. The full publication of the Manchester Notebooks therefore represents a welcome resource for Marxian scholarship. The eleven sheets of the original draft that have survived mainly elaborate Marx's studies in Paris and Brussels, but references to John Francis Bray and Robert Hyde Greg in sheet 24 suggest that part or the entire draft was written after Marx returned from Manchester.⁵⁰

Solving this riddle is beyond the scope of my comment here. However, an analysis of Marx's Paris and Brussels notebooks provides evidence of Marx's interest in classical political economy and progressive appropriation of the labour theory of value, and of his study of the social condition of the working class and of the first critiques of classical political economy developed by socialists like Sismondi. The draft article on List also heavily relies on the

46 See *MECW*, vol. 6, p. 143.

47 *MEGA*² IV/3, pp. 456–7.

48 *MEGA*² IV/3, p. 427.

49 *MEGA*² IV/3, p. 430.

50 Ikker 1988, pp. 224–5.

excerpts from Pecchio and Ferrier that Marx wrote before going to Manchester.⁵¹ Contrary to what is usually argued,⁵² it is in Marx's draft article on List that we find the first evidence of his adherence to the labour theory of value, which informs Marx's overall critique of List's national system.

In Marx's view, List's system presented no originality: List did nothing but repeat what had already been said not only by the mercantilists, but also by the classical political economists.⁵³ Being interested exclusively in protective tariffs, List paid no attention to the developments of classical political economy, which he renamed 'the School'. Marx provides textual evidence that List's main ideas had already been formulated by Ferrier in *Du gouvernement considéré dans ses rapports avec le commerce*, which List had copied without citing. Marx did not counterpose mercantilism and classical political economy: both provided elements for the immanent critique of political economy as the science of private property and allowed understanding of the underlying objectives of state intervention. For Marx, 'Labour' is the living basis of private property, it is private property as the creative source of itself. Private property is nothing but *objectified labour*.⁵⁴

List did not criticise the classical economists for giving adequate expression to capitalist society and, in Marx's view, began rather with the hypocrisy that had come to characterise the School of Saint-Simon. In its denunciation of the effects of the industrial system, the Saint-Simon School had identified the potentialities of industry beyond its capitalist form, demanding association as an alternative to competition. After the first labour struggles, however, the School naturalised the system, and glorified the bourgeoisie.⁵⁵

For Marx, the characteristic element and true base of List's national political economy was the theory of productive powers, which he had already criticised in his Paris Notebooks. In his draft, Marx considered this theory to be a theoretical regression. Only on its basis – after the harmful effects of the industrial system had manifested themselves, and the first critiques of it had emerged (Marx refers here in particular to Saint Simon and French socialism) – could industrialisation be presented as beneficial for the nation as a whole. Since the enrichment of the German industrial bourgeoisie was possible only by exploiting the working class and erecting protective tariffs – to the detriment of con-

51 Ikker 1988, p. 224.

52 See, for example, Mandel 1975.

53 *MECW*, vol. 4, p. 273.

54 *MECW*, vol. 4, p. 278.

55 *MECW*, vol. 4, p. 283.

sumers and, in particular, of the working population – List had to disguise its interests, having recourse to ‘extra-economic factors’.

List also denied the existence of an antagonism between industrial and agrarian interests. That explains why, in Marx’s view, he falsified Ricardo’s theory of rent, which was the expression of the struggle of the industrial bourgeoisie against the landowners. List’s lack of originality, for Marx, expressed the incapacity of the German bourgeoisie – which he deemed as ‘petty’, ‘weak-minded’ and willing to align with the landowners – to make any progress, be it on the theoretical or the economic plane.⁵⁶ Indeed, the alliance between the bourgeoisie and the landowners retarded industrialisation in Germany; it was only to face the growing threat of a political upheaval of peasants and proletarians that, in the late 1840s, the landowners and the industrial bourgeoisie formed an alliance, removing some political impediments to industrialisation.⁵⁷

In Marx’s eyes, List’s *dualistic* approach differed radically from that of the classical economists. By presupposing the separation of the state from capital but its subordination to the latter, the classical economists had laid the basis for formulating general laws of capitalist development.⁵⁸ The theory of productive powers, on the contrary, abstracted the action of the state from social relations, both nationally and internationally. In a context of backward development like that of Germany, for Marx, the bourgeoisie had proclaimed the autonomy of the state with respect to the ‘economic’ sphere because it needed to have state power at its disposal; and it affirmed the separation of the domestic and international spheres because it was vulnerable to competition in the world market.⁵⁹

To destroy the mysticism of the theory of productive powers, for Marx, it was sufficient to consult a book of statistics, where one could read about water-power, steam-power, horsepower, manpower etc. In capitalist society, human activity did not respond to any transcendent principle, but was a factor of production to be exploited like any other factor. Referring to Andrew Ure, the main theorist of the factory system, Marx affirmed that the development of productive forces aimed at generating profits by depriving workers of the control of their own activity.⁶⁰

⁵⁶ *MECW*, vol. 4, p. 294.

⁵⁷ Trebilcock 1981, pp. 76–7; Byres 1996, pp. 133, 143.

⁵⁸ *MECW*, vol. 4, p. 267.

⁵⁹ *MECW*, vol. 4, p. 280.

⁶⁰ *MECW*, vol. 4, p. 284.

Far from being an autonomous entity, for Marx, the German state was an instance of class power. Each nation-state represented the fusion of the interests of the bourgeoisie into a nation and was shaped by its competition with other sections of the bourgeoisie, which was, however, an international class. With its power based on labour exploitation, intra-class bourgeois competition was subsumed under its overall antagonism with the proletariat. Whereas the community of interest of the bourgeoisie expressed itself in the antagonistic form of intra-class competition, the community of interest of the working class was the basis of proletarian internationalism.⁶¹ The rise of the international working-class movement was the condition for an effective critique of political economy, able to call into question the system of which political economy was an expression.

Marx thus considered different forms of development – more advanced, as in England, or relatively backward, as in Germany – on the basis of the overall dynamic of a system that had already laid the premises for its supersession. German philosophical, French political and English industrial development, in his view, had created the conditions for the victory of social revolution in Western Europe, a victory that would lead to the emancipation of all humanity. Contrary to Kevin Anderson's view,⁶² therefore, in the mid-1840s Marx did not have a unilinear vision of development and revolution. Rather, as Hal Draper highlights, he 'started with what was essentially a primitive theory of permanent revolution'.⁶³

In the draft article, the conditions for a social revolution in a relatively backward country like Germany are not explored. This could depend on the fragmentary nature of this writing, but also on the limited development of Marx's critique of capitalism and on his excessive revolutionary optimism, which led him to attribute great weight to intellectual factors, such as German philosophy, in the revolutionary process. In 1845, both Marx and Engels were convinced that, given the astonishing rapidity of the growth of the proletarian movement, social revolution was imminent in Germany and could not be stopped by any bourgeois advance.⁶⁴ Over time, they came to recognise the increasing dynamism of the liberal bourgeoisie in Germany. If Marx first circled away from his previous view of permanent revolution, he then came 'back to it in a more sophisticated form, as the outcome of the revolution of 1848–49'.⁶⁵

61 *MECW*, vol. 4, p. 280.

62 Anderson 2010, p. 2.

63 Draper 1978, p. 174.

64 *MECW*, vol. 4, p. 238.

65 Draper 1978, p. 174.

Conclusion

The full publication of Marx's Notebooks of Manchester, in my view, provides further evidence of the inadequacy of Althusser's concept of an 'epistemological break' to illuminate the continuities and discontinuities in the development of Marx's ideas. I have shown, moreover, that Marx delved into the concept of classes and class antagonisms already in his Kreuznach Notebooks. His critique of political economy was stimulated in 1843 by his critique of Hegel, and started with the encounter with socialist and communist militants and thinkers in Paris, Engels in particular.

The first steps of Marx's critique of political economy are certainly characterised by a philosophical approach. His Paris and Brussels Notebooks, however, also provide evidence of his extensive study of classical and national political economy, of his progressive adherence to the labour theory of value, and of his appreciation of achievements and contradictions of classical political economy. Marx's study of French socialists like Sismondi and Buret played an important role in his appropriation of the labour theory of value, and for his study of the social question. It is therefore inaccurate to claim that the Manchester Notebooks 'mark the birth' of historico-political analysis of class relations and the class struggle. Since Marx already encountered the socialist critique of political economy in Paris and Brussels, moreover, the Manchester Notebooks cannot be considered Marx's first encounter with such a critique.

Bohlender has nevertheless highlighted two relevant characteristics of Marx's encounter with British socialists in Manchester: first, the connection between their engagement in the labour movement and their critique of political economy; and second, their scientific approach to such a critique. Indeed, the Manchester Notebooks show Marx's increased attention to the theoretical aspects of political economy, such as the relation between wage labour and capital, value and price, profit and the rate of profit. It is possible that, in the light of his adoption of the labour theory of value, Marx was now interested in developing an immanent critique of classical political economy. Just as Marx's study of political economy highlighted the centrality of labour in determining the value of commodities, Marx's and Engels's historical and philosophical investigations led them to affirm the centrality of 'forms of intercourse' (*Verkehrsformen*) in history.

Marx's studies in Manchester were an important step for the elaboration of the labour theory of value and surplus value, and for the development of the materialist conception of history. They also helped Marx to put in question his previous overestimation of intellectual factors in the revolutionary movement. The British socialists, in fact, had started to represent the interests of the

working class *in theory*, and had transmitted to the unions a confidence in their power. In contrast to the draft article on List, *The German Ideology* no longer presents philosophy as a determining factor in the revolutionary process, which is now understood as the result of the contradiction between the development of productive forces and capitalist forms of intercourse.

This understanding of the class struggle and social revolution, however, presupposed a critique of all previous socialist currents, including of the British socialists. Although Bray had laid the conditions for the elaboration of the theory of surplus value, in fact, his proposed solution, labour-money, was limited to the sphere of circulation and thus was disappointing for Marx. The development of both the labour theory of value and the materialist conception of history was closely connected to Marx's and Engels's identification of the proletariat as the class capable of subverting *production* relations and exercising power in the transition to a classless society. Marx's encounter with Manchester, if not the starting point, certainly played an important role in this development.

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Index of Names

- Adler, Max 18
 Adoratsky, Vladimir 19
 Adorno, Theodor W. 10
 Aftalion, Albert 227
 Althusser, Louis 230, 232, 254
 Anderson, Kevin 146, 263
 Annenkov, Pavel 233
 Arthur, Chris 10, 26, 157, 169, 185
 Atkinson, William 241, 257
 Aveling, Edward 36, 173
- Babbage, Charles 238
 Backhaus, Hans-Georg 10, 25
 Bailey, Samuel 164
 Baran, Paul 15
 Bastiat, Antoine 102, 105, 115, 130
 Bauer, Heinrich 238, 240
 Bauer, Otto 12, 18, 56, 73–74, 85, 86
 Bebel, August 46, 61
 Becker, Johann Philipp 235
 Behrens, Diethard 25
 Benjamin, Walter 50
 Benston, Margret 12
 Bernstein, Eduard 59, 64, 67
 Blanchot, Maurice 228–229, 249
 Blank, Hans-Joachim 25
 Blanqui, Adolphe 76, 255
 Blanqui, Auguste 237
 Blaug, Mark 138
 Böhm-Bawerk, Eugen von 6–8, 169
 Bohlender, Matthias 26, 251, 253, 256, 259, 264
 Bortkiewicz, Ladislaus von 9, 68, 75, 83, 86–87, 93
 Bouniatian, Mentor 227
 Braun, Adolf 18
 Bray, John Francis 26, 63, 242–248, 259–260, 265
 Brisson de Warville, Jacques-Pierre 260
 Bukharin, Nikolai 12, 17
 Bulgakov, Sergei 12
 Buquoy, Georg Franz August 76
 Buret, Eugène 238, 255–257, 264
- Campbell, Martha 169
 Canard, Nicolas Francois 76
 Carey, Harry 102, 105, 115, 130
 Carlyle, Thomas 241
 Castoriadis, Cornelius 11
 Chamborant, C.G. comte de 255
 Charasoff, Georg von 83
 Cherbuliez, Antoine Elisée 106, 110, 112–114, 255
 Cicero 248
 Clavell, Robert 257
 Cobbett, William 241, 258
 Cohen, Gerald A. 17
 Comte, August 74
 Cooper, Thomas 241, 257, 259
 Cornelissen, Christiaan 17
 Courcelle-Seneuil, J.G. 225
 Cournot, Antoine Augustin 76
 Croce, Benedetto 13
- Danielson, Nikolai (Nikolai-on) 12, 36, 58–59, 64–65, 73
 Davenant, Charles 257–258
 Davis, Mike 156
 Dmitriev, Vladimir K. 9, 93
 Dobb, Maurice 15
 Domela Nieuwenhuis, Ferdinand 58–59, 61, 65
 Draper, Hal 263
 Droz, Xavier 255
 Dühring, Eugen 60–62, 67, 74
 Duménil, Gérard 9
 Duncker, Franz 61
- Eckstein, Gustav 12
 Eden, Frederick Morton 241
 Engels, Friedrich 1–3, 5, 6, 10, 17–22, 29, 30–50, 52–55, 60–64, 67–74, 78, 81–82, 88, 90, 92, 96, 102, 114–115, 118, 131, 135–136, 141–143, 146–147, 156, 159, 163–164, 165, 169–170, 181, 191, 193–194, 206, 207, 213, 216, 219–220, 224, 228–235, 237–240, 249, 251–253, 257–258, 263–265
- Farjoun, Emmanuel 9
 Feller, Friedrich Ernst 73
- Cabet, Étienne 245
 Cafiero, Carlo 70

- Ferrier, Francois Louis Auguste 255, 257, 261
 Feuerbach, Ludwig 230, 231–232
 Foley, Duncan 9, 136
 Ford, Henry 152, 154
 Foucault, Michel 235
 Fourier, Charles 238
 Fowkes, Ben 145
 Freeman, Alan 9, 187
 Frobenius, Ferdinand Georg 87
 Fullarton, John 109

 Ganilh, Charles 76, 257
 Gaskell, Peter 239
 Gillmann, Joseph 15
 Godwin, William 238
 Gossen, Hermann Heinrich 76
 Graßmann, Timm 26, 44
 Gray, John 242
 Greg, Robert Hyde 260
 Grespan, Jorge 25, 31
 Grossmann, Henryk 3, 14, 74
 Grün, Karl 234
 Guizot, Francois 235

 Harney, George 238
 Haug, Wolfgang Fritz 5
 Hausner, Otto 65
 Hayek, Friedrich August von 83, 225
 Hegel, Georg Wilhelm Friedrich 21, 60, 74,
 230, 232, 240, 252, 264
 Heine, Heinrich 233
 Heinrich, Michael 39, 41, 44, 52–53
 Henning, Christoph 18
 Herr, Hansjörg 56
 Hess, Moses 233–234, 238
 Hicks, John 219, 227
 Hilferding, Rudolf 18
 Hodgskin, Thomas 63, 107–108, 241–242
 Hodgson, Geoff 17
 Holzkamp, Klaus 5
 Horner, Leonard 220, 222
 Hughes, J.R.T. 219
 Hume, David 86
 Hutcheson, Francis 86

 Ikker, Christine 260

 Jahn, Wolfgang 4
 Jevons, William Stanley 17, 74, 76, 88

 Jones, Ernest 238
 Jones, Gareth Stedman 240
 Jungnickel, Jürgen 35, 69, 143

 Kalecki, Michał 15
 Karatani, Kojin 230
 Kautsky, Benedikt 78
 Kautsky, Karl 14, 61, 64, 68, 143, 191
 Kay, James 239
 Kelley Wischnewetzky, Florence 21
 Keynes, John Maynard 137–138
 Kharasov, Georg von 14
 Kleinwächter, Friedrich 76, 77
 Kliman, Andrew 9
 Knies, Carl 6
 Kopf, Eike 163
 Kovalevskij, Nikolai M. 59
 Kriege, Hermann 240
 Kuczynski, Thomas 33
 Kugelman, Louis (Ludwig) 31, 60–61, 70,
 73, 92
 Kuruma, Samezo 3
 Kurz, Heinz D. 25
 Kuyper, Rudolf 17

 Lafargue, Laura 46
 Lafargue, Paul 75, 87
 Lange, Friedrich A. 60
 Lange, Oskar 17
 Lardner, Dionysius 75–76
 Lassalle, Ferdinand 3, 155
 Lattek, Christine 240
 Lebowitz, Michael 4
 Lefebvre, Jean-Pierre 48
 Lenin, Wladimir Iljitsch 82
 Leontief, Wassily 9
 Leske, Carl Friedrich Julius 237
 Lexis, Wilhelm 88
 Liebknecht, Karl 11
 Liebknecht, Wilhelm 61
 Lipietz, Alain 9
 List, Friedrich 59, 251, 254–255, 260–262, 265
 Locke, John 7, 62, 68, 241
 Loria, Achille 61
 Lukács, György 22
 Luxemburg, Rosa 12

 Machover, Moshé 9
 Macleod, Henry D. 67, 75–76

- Malthus, Thomas Robert 148, 259
 Mandel, Ernest 13, 136
 Mangoldt, Hans von 76
 Marshall, Alfred 88
 Marx, Jenny (Tochter) 73
 Massie, Joseph 68
 Mattick, Paul 17, 138
 McCulloch, John Ramsay 137, 238, 241, 257
 Medio, Alfredo 9
 Meißner, Otto 61, 70
 Menger, Carl 17, 88
 Meyer, Rudolf 61
 Meyer, Sigfried 31, 60, 62
 Michaelis, Otto 219, 224
 Mill, John Stuart 70, 241, 257, 259
 Misselden, Edward 257
 Mohun, Simon 136, 139
 Moll, Joseph 238, 240
 Moore, Samuel 36, 115, 173
 Morgan, Mary 92
 Mori, Kenji 26–27, 40, 43
 Moseley, Fred 24, 26, 144–145, 148, 150, 157, 169
 Mühlfort, Wolfgang 9

 Napoleon 223, 235
 Nassau, William sen. 241, 257
 Newmarch, William 219–220, 223
 Newton, Isaac 76
 Nicolaus, Martin 24
 North, Dudley 68

 Odermann, Karl Gustav 73
 Okishio, Nobuo 14, 87, 140
 Osiander, Heinrich-Friedrich 254–255
 Otani, Teinosuke 37
 Owen, Richard 232, 237–238, 240–241, 245, 259–260

 Paitaridis, Dimitris 139
 Pecchio, Giuseppe 255, 257, 261
 Perron, Oskar 87
 Petty, William 62, 68, 83, 257–258
 Pradella, Lucia 26, 146
 Proudhon, Pierre Joseph 232, 244, 246–247, 249

 Quételet, Lambert Adolphe Jacques 171

 Ramsay, George 112
 Rancière, Jacques 232
 Renner, Karl 18
 Reuten, Geert 26, 37–39, 41, 50, 127, 142, 195, 197–199, 202, 203
 Ricardo, David 2, 25, 56, 70, 80–85, 87–88, 90–92, 97, 107, 113, 115, 123–124, 129, 149, 161–162, 205–206, 225–227, 236, 248, 251, 253–254, 257–259, 262
 Rjazanov, David 18–19, 68, 78
 Rodbertus, Karl 2, 61, 68
 Rogall, Holger 56
 Roscher, Wilhelm 76
 Rosdolsky, Roman 3, 12, 101
 Roth, Regina 25, 48–50, 52–53, 55, 136, 191
 Rousseau, Jean Jacques 252
 Roy, Joseph 48
 Rubel, Maximilien 32, 34
 Rubin, Isaak 6, 7, 10
 Ruge, Arnold 252

 Sadler, Michael Thomas 241
 Saint-Simon, Henri de 238, 261
 Samuelson, Paul A. 81, 89–90
 Say, Jean-Baptiste 76, 253–254
 Scaron, Pedro 48
 Schäffle, Friedrich A. 60
 Schapper, Karl 238, 240
 Schefold, Bertram 162
 Schott, Sigmund 62
 Schramm, Carl A. 61
 Schütz, Karl Wolfgang Christoph 254
 Schumpeter, Joseph A. 31, 74, 187
 Schwartz, Winfried 3
 Seton, Francis 9
 Shaikh, Anwar 9, 136
 Shaw, George Bernard 88
 Shibata, Kei 14
 Sismondi, Simonde de 149, 254–257, 264
 Smith, Adam 7, 70, 83, 86, 88, 119, 236, 241, 253
 Sombart, Werner 17
 Sorge, Friedrich A. 64–65
 Spiethoff, Arthur 218, 225
 Sraffa, Piero 9, 14, 17, 25, 80, 83, 87, 89–93, 97, 120, 140
 Steedman, Ian 17
 Stiebeling, Georg Christian 61, 181, 191–194
 Stirner, Max 230–232

- Strachey, John 15
 Straubinger 234
 Struve, Piotr 12
 Sweezy, Paul 9, 15

 Thierry, Augustin 235
 Thio, Boe 157
 Thomas, Peter 41, 127
 Thompson, William 241–243, 259
 Thünen, Johann Heinrich von 59, 74–76, 87
 Tocqueville, Alexis de 238
 Tonak, Ahmet 136
 Tooke, Thomas 219–220, 223–224, 258
 Torrens, Robert 83
 Tsoulfidis, Lefteris 139
 Tugan-Baranovsky, Mikhail 12–13, 17, 225

 Uno, Kōzō 5
 Ure, Andrew 238, 255, 262

 Vollgraf, Carl-Erich 3, 4, 25, 35, 37, 43, 69, 80, 83–86, 88, 94, 136, 143, 163, 191
 Villegardelle, Francois 255, 260
 Villeneuve-Bargemont, Jean Paul Alban 255

 Wade, John 236, 241
 Wagner, Adolph 77
 Walras, Léon 76, 88
 Watts, John 260
 Weitling, Wilhelm 233–234, 238, 240, 245
 Weller, Paul (Pavel Veller) 19
 Weydemeyer, Joseph 234, 249, 251
 Williams, T.H. 225
 Willing, Gunter 4
 Wilson, James 225
 Wirth, Max 219
 Wolf, Julius 13, 181, 191, 193–194
 Wolff, Sam de 17, 233
 Zasulič, Vera 58
 Zelený, Jindřich 5
 Zimmermann, Marion 4

Index of Subjects

- Abstract labour 6, 153
Accumulation 13, 36–37, 39, 44, 52–53, 58,
120, 129, 145, 148, 150, 153–154
Agriculture 133, 151, 154, 210–211
Alienation 231–232, 253
Anti-Socialist Law [Germany] 59, 61
Australia 207, 220, 223
Austria 207

Bankruptcy 126, 134, 206
Books of Crisis 22, 206–219
Brazil 49
Breakdown of capitalism 143
Britain *see* England
Brussels Notebooks 255–257, 260, 264
Business cycles, *see* cyclical development

Capital
 (organic) composition of capital 14,
 129–131, 134, 138, 145, 166, 171, 180, 197,
 199
 constant capital 112, 114, 116, 121–122
 variable capital 148–149, 151
Capitalism 49, 50, 54–55, 57–59, 64, 83–86,
106, 112, 119, 124–125, 134, 137, 153, 156,
205, 238, 247, 257, 258
Capitalist production 40–42, 48–49, 54, 58,
77, 146–147
China 42, 65, 207
Civil War [USA] 58, 150
Civil War in France 235
Class struggle 11, 16, 232, 234–237, 240, 244,
254, 257
Classical economics 76, 80–81, 83–84, 88,
101, 115, 120, 123, 129, 141–142, 220, 242,
253, 262
Commodity (commodity form) 7, 69, 89, 90,
142, 147, 166, 196, 200
Commodity chain 7
Communism 232–233, 252
Complex labour 7, 178, 188
*Contribution to the Critique of Hegel's
 Philosophy of Right* 252
*Contribution to the Critique of Political
 Economy* (1859) 4, 66, 69, 70, 71, 104, 164
Credit 33, 38, 44, 45, 73, 223

Crises 15, 41, 44–45, 50, 52–55, 104, 120, 126,
134, 150, 153, 155, 206
Critique of the Gotha Program 155, 235
Critique of Political Economy (1859) 18, 163,
229
Cyclical development 15, 50, 132, 225

Dialectical method 160, 196, 204–205
Dual system approach 187–188, 197, 203

Economic and Philosophic Manuscripts 232,
254
Egypt 207
Eighteenth Brumaire of Louis Napoleon 235
Embodied labour approach 92, 130, 198, 201
England 42, 44, 48, 64, 114, 151, 206–207, 212–
215, 217, 218, 223, 232, 238, 256, 263
Epistemological break 230, 250, 264
Europe 42, 45, 155
Exploitation 17, 58, 84, 89, 110, 124, 165, 181,
188, 198–199, 203–204, 246

Fetichism 23
France 42, 48, 207, 232, 263
French edition of *Capital*, volume I (1872–5)
 11, 33–38, 42, 45, 48, 64, 145, 149, 152, 154

German Ideology 20, 21, 104, 230–231, 236,
240, 265
Germany 61, 207, 218, 232–233, 262, 263
Grundrisse 5, 13, 19, 24, 95, 99, 102, 105–106,
110, 114, 127, 133, 144, 146, 148, 207

Historical materialism 230, 234, 236

India 207
Intensity of labour 121, 165, 170, 176–181, 190,
193, 195, 201
International Symposium on Marxian Theory
 24
Italy 207

Jamaica 256
Journalism 208, 219

Kreuznach Notebooks 252

- Labour power [labour-power] 10–12
 Labour theory of value 16, 17, 90, 93, 147, 152, 172, 174
 Labour-time [labour time] 7, 161, 176, 245
 logical-historical approach 5–6
- Machinery 113, 116, 122, 147, 151, 202, 225, 227.
See also technology
- Manchester Notebooks* 240–248, 251, 258–259, 260
- Manifesto of the Communist Party* 18, 77, 153, 230
- Manuscripts (of *Capital*, drafts of *Capital*)
 20, 24–25, 31–36, 39–40, 43, 44, 46, 53, 56, 57, 60, 62, 63, 66–67, 99, 132, 159
- Manuscript 1861–3* 68, 95, 100, 108, 111, 115, 116, 127, 133, 144, 148, 151
- Manuscript of 1864–5* [1864/65 manuscript]
 [1864/65 draft] [1864/65 GRP manuscript]
 95–96, 115, 127, 132, 135, 141, 157, 159, 163, 181–182, 188, 190
- Manuscript of 1867–8* 131, 135
- Manuscript of 1875* 131, 135
- Marginalism 17, 88, 89
- Marx-Gesellschaft 24
- Mathematics [*including* algebra] 73–76, 86–87, 136
- Mercantilism 257–258, 261
- Money 29–30, 96
- Money market 214, 219, 222
- Neo-Ricardians 17
- Netherlands 42
- Okishio Theorem 14, 140
- On the Jewish Question* 252
- Operaismo* 16
- Panic of 1873 155
- Paris Commune 154, 156
- Paris Notebooks* 254, 255, 260–261, 264
- Physiocrats 12, 257
- Potentiated labour, *see* complex labour
- Poverty of Philosophy* 246
- Production price 10, 80, 162, 197
- Productive forces 125, 172, 177, 179–180, 197
see also machinery and technology
- Productive labour 136, 200
- Productivity 16, 122, 134, 145, 150, 172
- Profit 120
- Profit rate 3, 4, 8, 13–14, 33, 39, 41–42, 80, 91, 93, 101, 170, 183
- Profit rate, tendential fall of 15, 38, 51, 77, 82–83, 85, 145, 148, 154
- Profit squeeze 150
- Proletariat 155, 236, 253, 256
- Raw materials 117, 118, 145, 213–214, 217–218, 222
- Reproduction of labour power
- Reproduction schemes 9, 12, 13, 92, 132
- Reserve army 45, 86, 149
- Results of the Immediate Production Process* 11, 66
- Ricardian socialism 242, 257
- Ricardians 2, 116, 225, 258
- Russia 65
- Saint-Simon School 261
- Simple commodity production 6
- Six-book plan 3, 4, 29, 72
- Socialism 82, 85–86, 243, 250
- Spain 207
- Standard commodity 9, 93
- State socialism 56
- Surplus-value 44, 48, 50, 71, 97, 98, 128, 182, 185, 188, 246
- Surplus-value, absolute 171, 187, 198
- Surplus-value, rate of 14, 101, 165–166, 171, 174, 191
- Surplus-value, relative 99, 100, 103, 106, 171, 152, 155, 158, 171, 174, 183–187, 198
- Technology 129, 130, 132, 136, 138, 139–140, 150, 153, 180, 183, 187. *See also* machinery
- Theories of Surplus Value* 62, 66–67, 68, 95, 108
- Transformation problem 9, 62, 158, 195
- U.K. *see* England
- Unemployment 15, 16, 86, 148, 207, 247
- United States 60, 64–65, 137, 155, 206–207, 219, 220, 223
- Unproductive labour 11–12
- Value, monetary 158, 175, 188
- Value, Price and Profit* 70

- Value-form 10, 195–196
Value-magnitude [magnitude of value] 6,
198, 201
Value-substance 6
Vulgar economics 2, 88, 119, 257
Wages 93, 106, 129–139, 150, 153, 248, 254
Working classes 241–242, 245, 251, 254, 259–
260, 263
World market 45, 63, 152, 224